

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

GORDON SCHIFF and CELESTE ROYCE,

Plaintiffs,

v.

**U.S. OFFICE OF PERSONNEL
MANAGEMENT; CHARLES EZELL**, in his official capacity as Acting Director of the U.S. Office of Personnel Management; **U.S.
DEPARTMENT OF HEALTH & HUMAN
SERVICES; ROBERT F. KENNEDY, JR.**, in his official capacity as Secretary of Health and Human Services; **AGENCY FOR
HEALTHCARE RESEARCH AND
QUALITY**; and **MAMATHA PANCHOLI**, in her official capacity as Acting Director of the Agency for Healthcare Research and Quality,

Defendants.

Case No. 25-cv-10595-LTS

DECLARATION OF GORDON SCHIFF

I, Gordon Schiff, declare under penalty of perjury that the following is true and correct:

1. I am a Plaintiff in this action. I offer this declaration in support of Plaintiffs' Motion for a Preliminary Injunction. I have personal knowledge of the facts set forth in this declaration and could testify competently to those facts if called as a witness.
2. I live in Jamaica Plain, Massachusetts.

Background

3. I am an Associate Professor of Medicine at Harvard Medical School ("HMS"). At HMS, I am the Quality and Safety Director for the Center for Primary Care, and a Course Director for the Master's Program in Quality.

4. I am board-certified with the American Board of Internal Medicine.

5. I have practiced medicine as a primary care physician since 1976 and continue to see patients at Brigham & Women's Hospital ("BWH").

6. At BWH, I am the Associate Director of the Center for Patient Safety Research and Practice and Co-Chair of the Ambulatory Morbidity and Mortality ("M&M") Primary Care Conference.

7. I have a Doctor of Medicine degree from Rush Medical College and a Bachelor of Science degree from Tufts University where I graduated magna cum laude.

8. I am licensed to practice medicine in the State of Massachusetts.

Career and Research

9. I have been working in quality improvement, patient safety, and health IT, as a practitioner, teacher, researcher, institutional leader, and patient and policy advocate for more than four decades. My main areas of interest and contribution have been in the areas of diagnosis and medication errors and safety, health IT, primary care quality improvement, and patient advocacy.

10. Through my training and practice, I am very familiar with the prevailing medical standards and protocols for patient safety and diagnostic safety. From 1976 to 2007, I worked at Chicago's Cook County Hospital, where I was Chair of the Quality Assurance/Improvement Committee, Medical Director of the General Medicine Clinic, Chair of the Drug and Formulary Committee, and Rush Medical College/University, where I was a full Professor of Medicine.

11. In 2001, under a safety grant from AHRQ, I established the Cook County Hospital/Rush-Presbyterian-St. Luke's Diagnostic Error Evaluation and Research ("DEER") Developmental Center for Patient Safety Research (DCERPS). This center featured a series of projects such as linking lab and pharmacy data to identify errors, a large case series of diagnostic errors, and the development of the DEER taxonomy tool to classify errors.

12. In 2005, I was the lead author on a paper that proposed the DEER taxonomy tool for analyzing diagnostic errors. This framework centers on seven stages of the diagnosis process: access/presentation, history taking/collection, the physical exam, testing, assessment, referral, and follow-up. This framework is helpful for organizing discussions and targeting areas for improvement and research. Specifically, the framework identifies what went wrong and where a failure occurred in the diagnosis process. The DEER taxonomy tool has subsequently been widely used, for dozens of diagnosis quality improvement and research studies and has currently been cited 783 times according to Google Scholar.

13. In 2010, I received a grant from the Agency for Healthcare Research and Quality (“AHRQ”) to launch the Proactive Reduction in Outpatient Malpractice: Improvement Safety Efficiency and Satisfaction (“PROMISES”) project. The PROMISES project (2010–2013), for which I was the primary investigator, sought to improve patient safety by redesigning systems and care processes to combat medical and diagnostic errors and to reduce malpractice risk. PROMISES was a randomized controlled trial to test various interventions to improve safety in sixteen Massachusetts primary care practices, and it demonstrated significant improvement in the intervention practices (compared to the control usual care practices).

14. In 2015, the U.S. Institute of Medicine, now the National Academy of Medicine, released *Improving Diagnosis in Health Care*, a landmark report which was supported by AHRQ. I was invited as an expert on diagnostic errors to offer testimony for the report on diagnosis safety and improvement. I was also one of seventeen expert reviewers for the report. The chapter on an overview of diagnostic error in health care featured the DEER taxonomy tool.

15. In early 2017, I was the Principal Investigator leading the team that established the Primary-Care Research in Diagnostic Errors (“PRIDE”) Learning Network, a multidisciplinary

group of patient safety organizations working to study and improve diagnoses. This project was supported by a grant from the Gordon and Betty Moore Foundation to address the challenge of diagnostic errors. The PRIDE Learning Network was a collaboration between the BWH Center for Patient Safety Research and Practice and the Commonwealth of Massachusetts Department of Public Health Betsy Lehman Center for Patient Safety.

16. Through the PRIDE Learning Network, my colleagues and I collected and shared lessons from diagnostic error cases, conducted innovative research to improve primary care practice, and advanced diagnostic strategies, eight of which we subsequently published on AHRQ's Patient Safety Network ("PSNet") WebM&M *Case Studies* series.

17. From 2018 to 2020, I served on AHRQ's Diagnostic Safety Technical Expert Panel. I have served on ten other panels at AHRQ relating to patient safety and diagnostic error. Since 2022, I have served on the AHRQ steering committee for the Achieving Diagnostic Excellence through Prevention and Teamwork ("ADEPT") project.

18. I am one of the principal investigators for a current project to create a Diagnostic Center for Excellence at BWH with the University of Washington, to bring together the two fields of diagnostic improvement with communication and resolution programs.

19. I was a founding member of the Society to Improve Diagnosis in Medicine and a member of the American Public Health Association ("APHA"), where I was a founding member of the Medical Care Section Quality Improvement Committee. I am a past Chair of the APHA Medical Care Section. I am also a member of the Society of General Internal Medicine and the American College of Physicians.

20. I have authored over two hundred peer-reviewed publications in print and other media, including research studies, reviews, chapters, monographs, and editorials. I have served as

a journal peer reviewer for more than 20 medical journals, and I am the chair of the editorial board of *Medical Care*. I am the author of a chapter (Chapter 9, 21st Edition) in the prestigious *Harrison's Principles of Internal Medicine* textbook, entitled "Diagnosis: Reducing Errors and Improving Quality."

21. Through these projects and others, I have helped advance understanding, classification, and prevention of diagnostic errors, building on the development of the widely used DEER taxonomy for classifying where in the diagnostic process errors occur.

22. A true and correct copy of my curriculum vita is attached as Exhibit 1.

Publications on WebM&M and PSNet

23. I am the author, co-author, or editor of eleven papers for the WebM&M *Case Studies* series, which have been published on PSNet.

24. The PRIDE Learning Network has published eight papers for WebM&M *Case Studies* on PSNet.

25. To my knowledge, all or nearly all papers on WebM&M *Case Studies*, and the vast majority of content on PSNet, are authored by doctors that are not affiliated with AHRQ.

26. To my knowledge, AHRQ had never removed a paper published on WebM&M *Case Studies* before January 2025.

Drafting and Publication of *Suicide Risk Assessment*

27. One of the papers I co-authored, titled "Multiple Missed Opportunities for Suicide Risk Assessment in Emergency and Primary Care Settings" ("*Suicide Risk Assessment*"), is a commentary for the WebM&M *Case Studies* series, originally published on PSNet on January 7, 2022. Attached as Exhibit 2 is a true and correct copy of *Suicide Risk Assessment*.

28. The underlying case involved a young man who sought emergency care for suicidal ideation but was discharged several times, until a more serious suicide emergency that led to his involuntary psychiatric hospitalization.

29. In our commentary on that case, my co-authors and I highlighted the challenge of assessing imminent suicide and making diagnostic decisions. The main thrust of our analysis was that improving suicide prevention requires a multifaceted approach, which includes better screening tools, risk factor identification, proactive interventions, and treatment of underlying mental health disorders.

30. Our goal in writing the commentary was to help health care providers better confront the unique and serious challenges of assessing and managing patients who are at risk of suicide.

31. My co-authors and I submitted our initial draft of *Suicide Risk Assessment* to the WebM&M *Case Studies* series on or around September 2, 2021. The Editorial Team accepted the proposed commentary with suggested revisions.

32. Between September 2, 2021, and November 19, 2021, my co-authors and I produced nine drafts of *Suicide Risk Assessment*. These successive drafts and revisions were and are typical for the iterative peer review process.

33. In the second draft, dated September 25, 2021, we added the following language: “High risk groups include male sex, veterans, Indigenous tribes, Lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ) as well as more obvious populations such as those with serious mental illness, prior suicide attempts, ideation/attempts, alcohol or substance use, serious recent illness or emotional distress trauma or loss, history of recent trauma or loss.” In support of that proposition, we cited an article in *JAMA*, the world’s most widely circulated medical journal.

Attached as Exhibit 3 is a true and correct copy of an excerpted page from the second draft of *Suicide Risk Assessment*, containing that language.

34. Prior to publication, one of my co-authors separated that sentence into two sentences and added “suicidal ideation” and “being young” to the list of risk factors. The language in the final draft reads, “High risk groups include male sex, being young, veterans, Indigenous tribes, lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ).” See Exhibit 2.

35. At no time in the editorial process did PSNet’s Editorial Team—or any other AHRQ staff reviewing the drafts—suggest this language was scientifically inaccurate, not germane to the case study, or otherwise outside the bounds of PSNet’s selection or publication criteria.

36. Far from casting doubt on their veracity and relevance, AHRQ staff sought elaboration on the cited risk factors. On November 17, 2021, a medical officer in AHRQ’s Center for Quality Improvement and Patient Safety left a comment asking, “Is there a recommendation that these higher risk individuals be automatically screened?” Attached as Exhibit 4 is a true and correct copy of an excerpted page from the draft, which includes this comment.

37. In response, on November 24, 2021, I added a sentence noting a recommendation that “all patients with behavioral health risk factors receive screening.” Attached as Exhibit 5 is a true and correct copy of an excerpted page from the draft, which includes this new sentence.

38. AHRQ staff did not ask any further questions about this language referencing high risk groups.

39. In the published version of *Suicide Risk Assessment*, in a section on recommendations to improve patient safety, we noted that “[h]igh risk groups include male sex,

being young, veterans, Indigenous tribes, lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ).” *See Exhibit 2.*

40. The commentary ended with a prominent standard disclaimer, apparently added by AHRQ, that says “The authors are solely responsible for this report’s contents, findings, and conclusions, which do not necessarily represent the views of AHRQ.”

Removal of *Suicide Risk Assessment*

41. On January 31, 2025, I received an email from Dr. Patrick Romano, who is the Co-Editor-in-Chief at PSNet. In this email, Dr. Romano informed me that *Suicide Risk Assessment* had been removed from PSNet due to a perception that it inculcates or promotes “gender ideology.” A true and correct copy of Dr. Romano’s January 31, 2025, email to me is attached as Exhibit 6.

42. In this email, Dr. Romano attached a memorandum from the U.S. Office of Personnel Management. A true and correct copy of that attachment is attached here as Exhibit 7.

43. Hours later, I shared the email with my colleagues at Harvard and professional organizations to ask for their help in overturning this act of censorship and returning our commentary to PSNet. A true and correct copy of my email is attached as Exhibit 6.

44. Later that day, one of the email’s recipients, the Editor-in-Chief of the Bellevue Literary Review, replied to ask Dr. Romano, “can you share with me how exactly this transpired? Who contacted you? What was the process? How did they find this case study?” A true and correct copy of that email is attached as Exhibit 6.

45. On February 1, 2025, I received another email from Dr. Romano. He again explained that AHRQ staff were required to “[t]ake down all outward-facing media . . . that inculcate or promote gender ideology.” He said that guidance provided to AHRQ staff instructed them to remove “anything with the words ‘transgender,’ ‘nonbinary,’ or ‘gender identity.’” He

added that “[t]he phrase ‘LGBTQ’ is problematic because it includes the letter T for ‘transgender.’” He stated “AHRQ staff identified the relevant items (using ordinary search tools).” He explained that “[t]he total impact was to remove” about twenty pieces on PSNet, which included *Suicide Risk Assessment* as well as a second PRIDE WebM&M piece, *Endometriosis Commentary*, for which I provided editorial support. A true and correct copy of Dr. Romano’s February 1, 2025, email to me is attached as Exhibit 6.

46. On February 6, Dr. Romano emailed my co-authors and me, as well as Dr. Celeste Royce and her respective co-author on the *Endometriosis Commentary*, that AHRQ could republish censored versions of our pieces on the “non-negotiable” condition of the “removal of the problematic words—i.e., the words ‘transgender’ and ‘LGBTQ.’” Dr. Romano identified the “problematic words” that triggered the removal of *Suicide Risk Assessment* as “three words from a list of risk factors for suicide,” including “transgender” and “LGBTQ.” A true and correct copy of Dr. Romano’s February 6, 2025, email is attached as Exhibit 8.

47. I responded to this offer by emphasizing that removing the “offending words” would be unethical because it would require us to remove peer-reviewed, evidence-based information. I believed then, and believe now, that it is irresponsible to censor truth and replace it with nontruth. A true and correct copy of my email is attached as Exhibit 8.

Consequences of the Government’s Removal of *Suicide Risk Assessment*

48. I have listed *Suicide Risk Assessment* as a peer-reviewed publication on my CV. See Exhibit 1.

49. If my commentary remains removed from PSNet, I will have to remove this accomplishment from my CV or seek to republish the commentary somewhere less prestigious

and update my CV accordingly. However, it is unclear where I could republish my commentary even if I undertake the effort to do so, given the unique nature of AHRQ’s *Case Studies* series.

50. PSNet is a major publication in the patient-safety academic field because it has a wide readership and is known for publishing high-quality articles that practitioners and patients can rely on. It is widely considered the premier patient-safety website in the United States and internationally. The removal of the article has deprived me of a placement in the premier patient-safety publication and the opportunity to be credited for the commentary through a citation in future research. I will also need to revise my CV to remove this commentary from my publications.

51. At HMS, I am in the process of seeking promotion from Associate Professor to Full Professor. My record of publication in well-regarded forums such as PSNet directly factors into consideration for promotions.

52. In the future, I had expected I would be invited to write commentaries for AHRQ’s *Case Studies* series for publication on PSNet. However, given the Trump Administration’s ongoing censorship of terms that “promote or inculcate” what it deems to be “gender ideology,” my ability to offer a full commentary and views on medical cases will be restricted. Moreover, none of the Defendants have produced a full list of terms that will trigger their removal of PSNet articles. To avoid the censorship and removal of my future commentaries, I will need to steer clear of expressing my views related to gender and its connection to patient safety—regardless of how much evidence and expertise might inform those views.

53. The success of the study of patient safety hinges on preserving the free exchange of ideas, scientific integrity, and evidence-based inquiry. These same objectives are central to PSNet and the WebM&M *Case Studies* series.

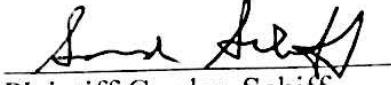
54. The removal and censorship of this article has a chilling and intimidating effect, both on the academic and research community as well as the transgender patients we care for. Academic researchers have been intimidated or threatened with the removal of grant funds—some projects have actually been terminated due to use of these “banned” terms and concepts. This removal of articles has a chilling effect on science and free academic expression, as well as my ability as a clinician to care for patients. For the patients, this act of censorship that singles out and stigmatizes certain groups is discriminatory and harmful. It means that such patients may not be recognized as having a risk factor (for suicide, or endometriosis) which will impair the quality of their diagnosis and safety.

55. When such political censorship as this occurs, it compromises the integrity and trustworthiness of a previously trusted patient safety resource, PSNet.

56. In my four decades as a practitioner, teacher, researcher, institutional leader, and advocate, I have never before now encountered an effort by the government to stifle the exchange of ideas in the field of patient safety or academic publication.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 31, 2025, in Boston, Massachusetts.


Plaintiff Gordon Schiff

3/31/25

EXHIBIT 1

Harvard Medical School
Curriculum Vitae

Date Prepared: 2/5/2025
Name: Gordon D. Schiff
Office Address: Division of General Internal Medicine
[REDACTED]
Boston, MA 02120-1613
Home Address: [REDACTED]
[REDACTED]
Work Phone: [REDACTED]
Mobile Phone: [REDACTED]
Work Email: [REDACTED]
Work FAX: (617) 732-7072
Place of Birth: Chicago, IL

Education

1972	BS <i>magna cum laude</i>	Biology	Tufts University Medford, MA
1976	MD	Medicine	Rush Medical College, Chicago, IL

Postdoctoral Training

07/76-06/77	Categorical Medical Internship	Medicine	Cook County Hospital, Chicago, IL
07/77-06/80	Medical Residency	Medicine	Cook County Hospital
07/80-07/81	Medical Chief Resident	Medicine	Cook County Hospital

Faculty Academic Appointments

01/00-05/05	Associate Professor	Medicine	Rush Medical College
06/06-01/08	Professor	Medicine	Rush Medical College
12/07-02/08	Lecturer	Medicine	Harvard Medical School (HMS), Boston, MA
03/08-	Associate Professor	Medicine	HMS

Appointments at Hospitals/Affiliated Institutions

08/81-05/87	Attending Physician	Medicine	Cook County Hospital
06/87-06/08	Senior Attending Physician	Medicine	Cook County Hospital
12/07-	Associate Physician	General Internal Medicine and Primary Care	Brigham and Women's Hospital (BWH), Boston, MA

Major Administrative Leadership Positions

Local

1987-1996	Director, Fantus General Medicine Clinic	Cook County Hospital
1996-2007	Director, Department of Medicine Clinical Quality Research & Improvement	Cook County Hospital
2007-	Associate Director, Center for Patient Safety Research and Practice	BWH
2010-	Chair, Brigham Network Ambulatory Morbidity and Mortality (M&M) Conference, Primary Care Conference	BWH
2012-	Assistant Course Director HMS-CRICO Best Medical Practice Maximizing Skills, Minimizing Risk course	HMS
2014-2016	Safety Science Director, Center for Primary Care Academic Improvement Collaborative, Center for Primary Care	HMS
2016-	Quality and Safety Director, Center for Primary Care	HMS
2018-	Course Director for the HMS Master's Program in Quality. Special Safety Topics course. MHQS 706.	HMS

Regional

1991-1993	Course Co-Director, Field Projects	Inventor's Council University of Illinois at Chicago Graduate School of Industrial Design
2010-2013	Director, Consortium for Patient Safety and Medical Malpractice	Massachusetts Department of Public Health, Boston, MA

Committee Service

Local

1976-1978	Chair/Developer, Committee on Department of Medicine History and Physical Form Implementation	Cook County Hospital
1977-1980	Design and Implementation of Computer Assisted Patient Summary. Housestaff representative	Cook County Hospital
1983-1987	Coordinator, Adverse Drug Reaction (ADR) program	Cook County Hospital
1983-2007	Drug and Formulary (P&T) Committee 1983-2000 2000-2004 2005-2007	Cook County Hospital Member Associate Chair Chair
1985-1992	Chair, Executive Medical Staff Quality Assurance Committee	Cook County Hospital
1985-1993, 2001-2007	Executive Medical Staff 1985-1993, 2001-2007 1989-1993	Cook County Hospital Department of Medicine representative Officer (Treasurer) Cook County Hospital
1985-2007	Department of Medicine representative, Hospital-wide Quality Assurance/Quality Improvement Committee	Cook County Hospital
1989-2007	Clinical Oversight Committee	Cook County Hospital, Department of Medicine Cook County Hospital
1991-2007	Chair, Drug Utilization Evaluation Committee	Cook County Hospital
1991-2007	Chair, Drug Utilization Review Program	Cook County Hospital
1992-1998	Quality Assurance/Quality Improvement Committee	Cook County Hospital
	1992, 1994, 1996, 1998	Committee Chair
1993-1997	CEO's Fantus Clinic Redesign Liaison Committee	Cook County Hospital
1993-2007	Anti-Infective Committee	Cook County Hospital
1995	Cook County Bureau of Health Services Clinical Council, Subcommittee on Ambulatory Information Systems	Cook County Hospital
1995	Founding Member, Rush/Cook County Hospital Research Affiliation Committee, Mission and Priorities Subcommittee	Cook County Hospital
1995-2000	Chair, Hospital-wide Multidisciplinary Quality Improvement Teams (Alcohol Withdrawal, Cholecystectomy Surgery Care, Congestive Heart Failure)	Cook County Hospital
1996-1998	Cook County Bureau of Health Services Managed Care Quality and Utilization Review, Steering Committee	Cook County Hospital
1996-2007	Rush-Cook County Research Committee	Cook County Hospital

1997-1998	Cook County Bureau of Health Services Information Task Force	Cook County Hospital
1998-2004	Chicago Antibiotic Resistance Project (CARP) (CDC funding Project)	Cook County / Rush Medical College / Oak Forest Hospital / Provident Hospital, Chicago IL Quality Improvement (QI) Consultant
	1998-2004	Member, Information Management Steering Committee
	1998-2004	Cook County Hospital
1998-2004	Laboratory Steering Subcommittee	Cook County Hospital
1999	Cook County Bureau of Health Services Physician Order-Entry Implementation Steering Committee	Cook County Hospital
1999-2002	Co-Convenor, Hospital-wide Medication Errors Committee	Cook County Hospital
1999-2007	Founding Member, Rush-Cook County Section of Medical Informatics	Rush University/Cook County Hospital, Chicago, IL Founding Member
2000	1999-2007 Chair, Executive Medical Staff <i>Ad Hoc</i> Informatics Systems Committee	Cook County Hospital
2001-2002	Pharmacy Services Improvement Taskforce	Cook County Hospital
2001-2004	Cook County Bureau of Health Services Cerner Health Information System (HIS) Implementation Committee: for new HIS Computer System Implementation	Cook County Hospital
	2001-2002	Member, Clinical Core Selection Committee
	2002-2004	Member, Clinical Rules/Alert Committee
2001-2004	Lead physician, Cerner Mobile Millennium Project	Cook County Hospital
2003	Team Leader, Failure Modes Effects and Analysis Project: Warfarin Lab Results Medication Improvement	Cook County Hospital
2003-2007	Founding member; Representative Cook County Hospital, Division of General Medicine Social Medicine Section	Rush Medical College-Cook County Stroger Hospital, Chicago IL.
2003-2007	Physician member/representative, Cook County Bureau of Health Services Health Insurance Portability and Accountability Act (HIPAA) Steering Committee	Cook County Hospital
2003-2007	Cook County Bureau of Health Services Bureau-wide Formulary Committee	Cook County Hospital

2004	Search Committee for Department of Emergency Medicine Chair	Cook County Hospital
2004	Medication Management Standards Taskforce	Cook County Hospital
2004-2006	Cook County Bureau of Health Services Pharmacy Special Taskforce	Cook County Hospital
2005	Co-Chair, Cook County Bureau of Health Services Quality Outpatient Pharmacy Improvement Task Force	Cook County Hospital
2008 -2011	Communicating Clinically Significant Test Results Steering Committee	Partners HealthCare System (PHS), Boston, MA
2008-2011	Communicating Clinically Significant Test Results Task Force Clinicians' Committee	PHS
2008 -2013	Acute Care Documentation (ACD) Project Clinical Content Committee	BWH
2008-	Pharmacy and Therapeutics (P&T) Committee	BWH
2009-2016	Chair. Ambulatory Risk Management Leader Group	CRICO Harvard Risk Management Foundation, Boston, MA
2013-2015	Interview Committee. Biomedical Informatics Training Programs (BIRT)	BWH
2014	Selection Committee for Biomedical Informatics Research Trainees, Division of General Internal Medicine and Primary Care	BWH
2014	e-Care Clinical Decision Support (CDS) Taskforce	BWH
2014-2017	e-Care CDS Taskforce	PHS
2015	Health Information Technology (HIT) taxonomy codes development technical working group	CRICO Harvard Risk Management Foundation
2018-	PCP Safety Net Advisory Committee	BWH
2018-	EHRL (AHRQ Learning Lab) Steering Committee Representative, Opioid Task Force, Phyllis Jen Center	BWH
2019-2020	Primary Care Management of Non-Face-to-Face Work Task Force	CRICO Harvard Risk Management Foundation
2021-	Primary Care Equitable Patient Care Change Group	BWH

Regional

2006	State of Illinois Governor's Patient Safety Summit	University of Illinois at Chicago, Chicago, IL
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2015-	Representative from HMS Center for Primary Care	Massachusetts Coalition for the Prevention of Medical Errors, Burlington, MA
2018	Vanessa Merker PhD Committee. Understanding the Diagnostic Process in a Rare, Genetic Disease: A Mixed Methods Study of Schwannomatosis. Study of diagnostic errors and delays	BU & MGH PhD Thesis Advisor, Committee Member.
2018-2019	Medication Overload Project, Advisory Committee	Lown Institute Panel Member
2020-	Advisory Committee to Research Committee	Betsy Lehman Center for Patient Safety, Boston, MA

National

1989	Panel on Ambulatory Review	Wisconsin Peer Review Organization, Madison WI
1993-1994	Review Panel on Cost Sharing and Health Reform	U.S. Office of Technology Assessment, Washington, DC
1996	National Steering Committee writing committee for consumer education brochure Prescription Medicine and You: A Consumer Guide	Agency for Health Care Policy and Research (AHCPR), National Council for Patient Information and Education (NCPIE) Washington DC
1999-2000	Expert Technical Panel, Study of Clinically Relevant Indicators for Pharmacology Therapy (SCRIPT)	Health Care Financing Administration (HCFA), Washington DC and Joint Commission on Accreditation of Healthcare Organizations Oak Brook IL
2002	Invited expert panelist, Improving Medical Device Safety-Supporting Resilience and Innovation in Healthcare Organizations	US Food and Drug Administration (FDA), Rockville MD, and University of Chicago Developmental Center for Research in Patient Safety (DCERPS), Chicago IL. PHS
2002-2003	Ambulatory Computerized Provider Order Entry (CPOE) Center for Information Technology Leadership Expert Panel	The Leapfrog Group, Washington, DC
2002-2003	National Clinician Initiative Work Group	The Leapfrog Group
2002-2005	Expert Advisory Committee for the Leapfrog Patient Safety CPOE Standards and Evaluation Tool	CMS, Baltimore, MD
2003	Faculty Consultant/Expert Reviewer, Patient Safety Learning Pilots: Centers for	

	Medicare and Medicaid Services (CMS)/Quality Improvement Organizations (QIO) Learning Session #2	
2003	Model Development Survey Panel to study information system technology adoption	Center for Health Systems Research & Analysis, University of Wisconsin, Madison WI
2003	Developing a National Action Agenda Steering Committee, Quality and Safety Track	National Health Information Infrastructure, Washington, DC
2006-2007	RAND National Patient Safety Indicator Measurement Delphi Panel	RAND Corporation, Santa Monica, CA
2006	Robert Wood Johnson (RWJ) Leading Change Disparities Solutions Initiative Advisory Board	Disparities Solutions Center, Partners MGH Institute for Health Policy, Boston, MA
2007	ASHP Statement on the Role of Health-System Pharmacists in Public Health Review Committee	American Society for Health System Pharmacists (ASHP)
2007-2008	Physician Practice Safety Self-Assessment Pathways for Patient Safety Tool Development Expert Committee	Health Research and Educational Trust (HRET), Institute for Safe Medical Practice (ISMP), and Medical Group Management Association (MGMA)
2007-2009	Consultant, Closing the Feedback Loop to Improve Diagnostic Quality	University of Alabama
2008	Expert Panel, Prioritizing Patient Safety Outcomes Measures: Results of an Expert Consensus- working paper. WR-601-AHRQ	Agency for Healthcare Research and Quality (AHRQ), Washington, DC
2008	Invited Expert Panel, "Defining Continuous Quality Improvement (CQI) in Health Care". AHRQ Evidence Review for Quality Improvement project.	AHRQ
2008	Invited expert. Brookings Forum Meeting on Post-Market Evidence	Brookings Institution Washington, D.C.
2008	Expert Panel. Trigger and Targeted Injury Detection Systems	AHRQ
2009-2011	Technical Assistance Panel, AHRQ Evidence Report on Medication Management Systems and Health Information Technology	McMaster University, Hamilton Ontario
2008-	Center for Education and Research in Therapeutics (CERT) National Steering Committee	AHRQ
2009	Invited expert participant. Comparative Effectiveness Research Method Symposium	AHRQ

2009	Technical Expert Panel, The Patient Safety Education Project (PSEP)- Patient Safety Education in nursing homes Project.	AHRQ
2010	Evaluation of Primary Care Practice Transformation Efforts, Patient Centered Medical Home (PCMH) Process/ Implementation Evaluation Working Group	Commonwealth Fund
2010-2011	Key contributor, Educational Module: Reducing Diagnostic Errors (electronic and paper versions).	National Patient Safety Foundation, Boston, MA
2010-2013	Data Safety Monitoring Board	“Using Novel Canadian Resources to Improve Medication Reconciliation at Discharge” study (Robyn Tamblyn PI) AHRQ
2011-2012	Technical Advisory Panel, Proactive Risk Assessment During the Clinical Laboratory Testing Process to Reduce Diagnostic Error	
2013-2016	Expert Advisory Board, Patient Safety Center of Inquiry (PSCI) on Measurement to Advance Patient Safety (MAPS)	Veterans Administration, Washington, DC
2014	Strategic Priorities Expert Panel, Continuum of Care Safety	IHI
2014	Invited Participant, CERT Promoting Appropriate Medication Use: A Collaborative Strategy Symposium	AHRQ
2014	Invited expert testimony and reviewer, Committee on Diagnostic Errors in Medicine	Institute of Medicine, Washington, DC
2014-2015	Taskforce member, Teamwork Working Group	National Cancer Institute / American Society of Clinical Oncology. Alexandria, VA
2015	Expert reviewer, Technical Brief, Patient Safety in Ambulatory Settings	AHRQ
2016	Advisory Board, Curriculum on Diagnostic Reliability	Co-author, key informant Kaiser Permanente School of Medicine
2017	Pragmatic Insights on Patient Safety Priorities and Intervention Strategies in Ambulatory Settings. Technical Brief DOI: http://dx.doi.org/10.1016/j.jcj.2017.06.009	AHRQ
2017	Expert Interviewee, Study of the Benefits of Interoperable Health Information Exchange Interoperable Exchange of Health Information (IEHI)	Office of the Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services /

2017-2019	Member: Technical Advisory Group. Volume I: Technical Proposal Published 7/13/17 Making Health Care Safer III Project/Contract Abt RFTOP Number 17-233-SOL-00463	Urban Institute AHRQ
2018	Consultant on report and redesign of Diagnostic Error coding taxonomy, PA-PSRS Event Analysis	Pennsylvania Patient Safety Authority
2018	Expert panelist, Thought Leader Feedback Session	US Pharmacopeia
2018	Symposium Expert Panelist, Achieving a Learning Health System for Diagnostic Excellence: Toward a Learning System for Improving Diagnosis & Facilitator for Stroke Diagnosis Group, Design of Prototypical Learning Cycle	Moore Foundation, Ann Arbor, MI
2018	Consultant and Presenter on Clinical Documentation, Specialist Certificate Program “Using Health Information Technology (HIT) to improve healthcare quality & safety”	International Society for Quality in Health Care (ISQua)
2018-2019	Expert panelist for Diagnostic Error Scoping Review (DEScR) Project, Division of Laboratory Systems (DLS), CSELS	Centers for Disease Control and Prevention
2018-2020	Diagnostic Safety Technical Expert Panel, Medical Office Surveys on Patient Safety Culture™ (SOPSTM), Safety Culture Survey: Diagnostic Safety Supplemental Items for Medical Offices	AHRQ
2019	Research Advisory Board	“Exploring and Addressing Diagnostic Error Disparities Related to Cognitive Reasoning Pitfalls” study / Society for Improvement of Diagnosis in Medicine
2020	Invited Participant, Summit and Roundtable on Research Priorities for Patient Safety Improvement	AHRQ
2020-2021	Member of research team	“Learning While We Build: Identifying the Must-Know Research Questions for Safe and Effective Telediagnosis Multi-Stakeholder Effort to Issue Research Recommendations” study / PCORI / Society to

2020-2022	Expert Panel (recommendations published in JAMA Netw Open 2022;5(2):e2148599)	Improve Diagnosis in Medicine “Development of a Metric to Detect and Decrease Low-Value Prescribing in Older Adults” study AHRQ
2020-2021	Tool Development Committee, Common Formats (for Diagnosis Error Structured Reporting) / Site PI for Medstar development and testing project	
2021	Diagnostic Disparities Project Review Panel	Society to Improve Diagnosis in Medicine & Coverys Community Healthcare Foundation
2021-2022	Technical Advisory Committee, Composite Measure of Diagnostic Performance for Pulmonary Embolism (John Sather PI)	Yale School of Medicine / Gordon and Betty More Foundation Diagnostic Excellence Initiative
2021	Panelist, Telemedicine Roundtable	AHRQ
2022-2024	Advisory Committee. Pediatric Dx Uncertainty Project. (Tina Cifra MD PI)	CRICO Funded Project
2022-2026	Steering Committee. Achieving Diagnostic Excellence through Prevention and Teamwork (ADEPT). Auerbach PI	AHRQ
2024	ABIM Foundation Medical Debt-Convening panel meeting. Invited expert participant. 6/10/2024	ABIM

International

2016	PhD Thesis advisor/reviewer Anna-Riia Holmström, the. Medication Safety PhD	University of Helsinki
2018-2021	Global Digital Exemplar (GDE) Independent Evaluation Advisory/Steering Committee	National Health Service, UK
2019	Expert Panel Member, Centre for Health Systems and Safety Research. Australian Institute of Health Innovation. Andrew Georgiou PI.	Australia Centre of Research Excellence in Diagnostic Informatics (CREDI)

Professional Societies

1980-	American Public Health Association (APHA)	
1980-		Member
1992-		Member, Drug Policy Committee

	1993-	Founding member, Quality Improvement Committee (QIC)
	1995, 1997, 2003-	Annual Meeting Abstract Reviewer
	1996-1999	Reviewer
	1997-2000	Chair, Quality Improvement Committee
	1999-	Medical Care Section Counselor Founder, Chair, Avedis Donabedian Quality Award Committee
	2003-	Annual Meeting Abstract Reviewer
	2004-2006	Medical Care Section Chair-Elect
	2005-2007	Medical Care Section Chair
	2008-2010	Immediate Past Chair; APHA Intersectoral Council representative
1984-	Society of General Internal Medicine (SGIM)	
	1984-	Member
	1985-1992	Abstract reviewer
	1990-1991	Midwest meeting workshop coordinator
	1991-1992	Midwest meeting interest group leader/ convener
	1991-1998	Institutional representative, for Cook County Hospital
	1995-1998	Member, SGIM research committee
	1999, 2001	Nominee, President Midwest SGIM
	2002-2007, 2009, 2011	Judge, for Lipkin & Hamolsky Student Awards committee
	2002	Meeting Meet-the-Professor, SGIM Annual Meeting
	2003	Chair, Annual Meeting Health Policy Workshop Reviewer Committee
	2003	Faculty, One-on-One Mentoring program national SGIM meeting
	2003-2005	Member, Herbert W. Nickens Award Committee
	2009	Judge New England Region
1984-2010	Society for Medical Decision-Making	
	1984-2010	Member

	1989-1991	Organizer, Co-Chair of Chicago Chapter Member
1985-1997	International Society of Pharmacoepidemiology	
1985-2008	United States Pharmacopeial Convention 1985- 1985, 1990, 1995	Expert panel member Member Committee of Revision, Official at-large delegate for United States
	1985-2000	Member, Consumer Interest/Health Education Panel
	1990-2000	Committee Chair, Consumer Interest/Health Education Panel
	1990-2000	Member, Committee of Revision
	1990-2000	Member, Drug Information Division (DID) Executive Committee
	1995-2000	Committee Chair, Consumer Interest/ Health Education Panel
	1996	Convener, USP High Tech IT Working Group
	2000-2005	Member, Safe Medication Use (SMU) Expert Committee
	2000-2005	Member, MedMARX/Medication Error Reporting System: Data Analysis Working Group
	2006-2010	Member, Medication Error Data Analysis Expert Panel
1986-2003	Association for Health Services Research	
1989-	Physicians for a National Health Program	
	1989	Founding member
	1991-	National Board member
	1994-1995	National President
	2003-2017	Speaker, at annual national leadership development training sessions
1989-	Alliance for the Prudent Use of Antibiotics	
1991-	American College of Physicians	
	1999-2006	Member, Illinois Region Public Policy Committee
1993-2006	American College of Medical Quality	
1995-2002	American Diabetes Association	
1996-	International Society for Quality in Health Care	

1997-2007	Chicago Area Third Wave Group	Member
1997-	American Medical Informatics Association 2003,2004, 2006-2007, 2011	Abstract reviewer Member National meeting Scientific Program Committee for Applications of Informatics Track
	2006	
	2008	Review of papers for the AMIA Annual Symposium selected by members of the Scientific Program Committee (SPC)
	2008	Panel / Writing Committee, AMIA Draft Group for Response to the ONC / CMS Health IT Burden Reduction Report
	2019	
2005-2011	Healthcare Information and Management Systems Society (HIMSS) 2007	Task force and writing committee member: HIMSS White Paper: EHR Implementation in Ambulatory care (white paper) Clinical Decision Support Workgroup and Task Force, Clinical Decision Support Guidebook Series
	2011	
2011-2024	Society to Improve Diagnosis in Medicine 2011	Founding member
	2011-	Member, Research Steering Committee Reviewer Abstracts annual DEM Conference
	2015	Invited participant national SIDM Board meeting
	2015-	Member, Quality Improvement Committee
	2021	Project Advisory Team, Improving TeleDiagnosis: A Call to Action

Grant Review Activities

1996-2007	Cook County Research Committee for Rush/Cook County Collaborative Research Grant Program applications.	Cook County/Rush University Member
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1989	Panel on Ambulatory Review. Grant Review	Wisconsin Peer Review Organization Member
1993-1994	Review panel "Benefit Design in Health Care Reform," OTA-BP-H-112.	Office of Technology Assessment (OTA) Reviewer
1999-2000	Theory and methods for minimizing drug name confusion errors	National Patient Safety Foundation Reviewer
2003	Grant Review Study Section: Safety Practices Implementation Challenge Grants (RFA HS-03-005).	National Institutes of Health (NIH)/AHRQ Reviewer
2003	Grant Peer Reviewer-Tahiti Project: Advancing Health Care Info Technology Review Proposals.	Kaiser Permanente Research Foundation Reviewer
2004	Grant Review Study Section: Transforming Healthcare Quality Through Information Technology (THQIT) Health Information Technology Resource Center (AHRQ-04-0016)	AHRQ/National Library of Medicine (NLM) Reviewer
2004	Grant Review Study Section: Transforming Healthcare Quality Through Information Technology (THQIT) – Demonstrating the Value of Health Information Technology Grants. A-HS-04-012 (HITRC) Special Emphasis Review Panel	AHRQ/NLM Reviewer
2005	Grant Review Committee, Pharmacy-Nursing Partnership for Medication Safety Grant Program. Final Review	ASHP Research and Education Foundation Reviewer
2007	Special Emphasis Panel (SEP) for the Funding Opportunity Announcement (FOA), entitled, Ambulatory Care Patient Safety Proactive Risk Assessment. Rockville, MD. 5/21-5/22/07	AHRQ Reviewer
2008	Grants Programme for Applied Research: Enhanced Patient Safety via Improving Diagnostic Accuracy in Primary Care. NIHR Program Grants for Applied Research	National Institute of Health Research, UK Reviewer
2008	Program Grants for Applied Research Research Full Stage	UK National Institute of Health Peer Reviewer
2018	reviewer Policy Research Program; Application PR-ST-01-1001 PRP(ST-01-XX) Optimizing ePrescribing in Hospitals	National Institute for Health Research, National Health Service, UK Reviewer

2014, 2015,	Patient Safety Grants	CRICO
2016, 2017		Reviewer
2018	Policy Research Programme PR-ST-01-10001 Optimizing ePrescribing in Hospitals	National Health Service, UK
2020, 2021,	DxQI Seed Grant Program, Moore	Reviewer
2022	Foundation grant project	Society to Improve Diagnosis in Medicine (SIDM) Review Committee Member

Editorial Activities

Ad hoc Reviewer (selected list)

Annals of Internal Medicine
Applied Clinical Informatics
BioMed Central (BMC) Medical Informatics and Decision Making
BMJ Quality and Safety in Health Care
BMJ Quality Open
Diagnosis
Health Affairs
International Journal Health of Services (IJHS)
Joint Commission Journal on Quality and Patient Safety
Journal of Clinical Informatics (JCI)
Journal of General Internal Medicine (JGIM)
Journal of Public Health Policy
Journal of the American Medical Informatics Association (JAMIA)
Journal of the American Medical Association (JAMA)
JAMA
JAMA Internal Medicine
JMIR Medical Informatics
Medical Care
New England Journal of Medicine (NEJM)
NEJM Catalyst
Journal of Patient Safety

Other Editorial Roles

1997	Guest Editor	Institute for Healthcare Improvement (IHI) Eye on Improvement Newsletter <i>Medical Care</i>
1997-2011	Editorial Board	IHI Eye on Improvement
1999-2001	Editorial Board	<i>Journal of Public Health Policy</i> <i>Yearbook of Medical Informatics</i>
1999-	Editorial Board	<i>Journal of Public Health Policy</i>
2002	Review Board	<i>Joint Commission Journal on Quality and Safety in Healthcare</i>
2003	Interim Editor	<i>Joint Commission Journal on Quality and Safety in Healthcare</i>
2005	Guest editor, Special Issue on Critical Test Results Management	<i>Joint Commission Journal on Quality and Safety in Healthcare</i>
2007-2014	Editorial Board	<i>Joint Commission Journal on Quality and Safety in Healthcare</i>

2008	Guest Editor, Special Issue Medical Care on Health Insurance in the U.S.	<i>Medical Care</i>
2008-2011	Editorial Board	Clinician-Consumer Health Advisory Information Network (CHAIN) Online —AHRQ CERTs educational, informational, web-based resource dissemination
2011-2012	Guest Co-Editor, Special Issue on Pharmaceutical Policy	<i>Medical Care</i>
2011- 2013-	Chair of Editorial Board Editorial Advisory Board	<i>Medical Care</i> <i>BMJ Quality & Safety</i>
2014	Reviewer "Chapter 1. Introduction to N-of-1 Trials: Indications and Barriers" (DECIDE-13-035)	Decide AHRQ Effective Health Care Program
2017	Academic Guest editor, Medication reconciliation manuscript	<i>PLOS Medicine</i>
2019-2023	Editor for PRIDE Cases (total 8 to date; Acute Renal Failure 2° BPH, Colon Cancer, Spinal Epidural Abscess, Endometriosis, Breast Cancer, Suicide Risk) published at AHRQ Web M&M	AHRQ PS Net website https://psnet.ahrq.gov/home

Book/Textbook Editorial Roles

2006	Book editor; author or co-author of five chapters.	<i>Getting Results: Reliably Communicating and Acting on Critical Test Results.</i> Oakbrook Terrace, IL: Joint Commission Resources; 2006
2013	Book Peer Reviewer (later invited to contribute chapter)	Annemarie Jutel Goldstein and Kevin Dew, eds. <i>Social Issues in Diagnosis: An Introduction for Students and Clinicians.</i> Baltimore, MD: Johns Hopkins University Press, 2014.

Honors and Prizes

1989	Health Activist Award	Health Policy Advisory Center
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1994	Selected Interviewee for 50 Leaders in Medicine	Mentors, Mastery and Technology Project. Training in Internal Medicine Kohrman, Anderson, Clements, editors. Annals of Internal Medicine
2000	Top 10% Quality Reviewer Commendation	Physicians for a National Health Program
2001	Quentin D. Young Health Activist Award	Institute of Medicine of Chicago
2002	Fellow	Cook County Hospital Executive Medical (EMS) Staff
2002	Special Leadership Recognition Award	Leadership in Committee to Save Cook County Hospital's advocacy role in building new Cook County Hospital
2004	Top 10% Quality Reviewer Commendation	<i>Annals of Internal Medicine</i>
2005	Chicago Patient Safety Leader of the Year award	Institute of Medicine of Chicago / Chicago Patient Safety Forum / Otho Sprague Memorial Institute
2005	Soul of Medicine Award	Physicians for Social Responsibility
2006	1st Annual Advocacy and Community Service Award	Midwest Society for General Internal Medicine (SGIM)
2006	30 People for the Future	Modern Healthcare. Celebrating 30 years: the people
2006	Lifetime Achievement Award	Selected as one of 30 national “leaders who are likely to continue to shape health care in the years and decades ahead.”
2008	Special service to the community award	
2009	Partners in Excellence Award	Member of communicating Critical Test Results Task Force.

2010	Rx for Excellence Award	Massachusetts Medical Law Report 3 rd Annual Leaders in Quality	
2012	Partners in Excellence Team Award	Partners HealthCare	Understanding Emergency Physician Electronic Documentation and Decision Support Needs
2012	The Brigham Way Award	BWH	Honored as Model Staff Member for The Brigham Way Campaign (poster with quote, awards presentation)
2013	Subject of Harvard Medical School Graduation Student Commencement Speaker	HMS 225th Commencement Speaker Deep Shah.	Cited for care of BWH inpatient and teaching role model
2014	Top reviewer commendation	<i>Annals of Internal Medicine</i>	
2014	Outstanding Leadership, Service and Dedication Award	Medical Care Section, American Public Health Association	
2015	Top Article of Year	<i>BMJ Quality & Safety</i>	CPOE Errors Analysis and Vulnerability Testing study
2017	The Brigham Way Award	BWH	Extraordinary service to patients
2018	Partners in Excellence Award	Partners HealthCare	Indications-based Prescribing Project
2019	Mark Graber Diagnostic Quality Award	Society to Improve Diagnosis in Medicine (SIDM)	Top international contributor in diagnosis safety Inaugural awardee
2020	John M. Eisenberg Award for Patient Safety and Quality	Joint Commission and the National Quality Forum (NQF)	2019 Lifetime Achievement Award recipient (nation's top quality/safety award)
2021	Avedis Donabedian Quality Award	American Public Health Association (APHA) Medical Care Section	22 nd Annual award for contributions to medical quality

2024	Editor's Choice Award Journal of the American College of Clinical Pharmacy (JACCP)	Top article in past 2 years for editorial Bruce Lambert and I wrote in 2022 on the Radonda Vaught medication error
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Report of Funded and Unfunded Projects

Funding Information

Past

1989-1991 Improving Quality in Cook County Hospital General Medicine Clinic
 Robert McCormick Foundation
 PI
 Grant for improving care in the General Medicine Clinic at Cook County Hospital.

1999-2000 Theory and methods for minimizing drug name confusion errors
 National Patient Safety Foundation
 Co-investigator (PI Bruce Lambert)
 Evaluating screening algorithms for look-alike sound- alike drug names' medication errors. Medical expert for project

1999-2002 RAND evaluation component of Chronic Disease Collaborative
 RAND Corporation
 Site PI (PI Edward Wagner)
 Multisite IHI Collaborative Project on congestive heart failure. Site PI for evaluation of outcomes and effects of multidisciplinary intervention and learning sessions.

2000 Potential Effects of Online Pharmacies on the Patient Provider Relationship
 University of California San Francisco
 Consultant (PI Helene Lipton)
 Compared patient survey response related to pharmacy services of online mail order pharmacies and traditional community-based pharmacy services.

2001-2005 Development of Center for Evaluation and Research in Patient Safety: The Cook County Hospital/Rush-Presbyterian-St. Luke's Diagnostic Error Evaluation and Research (DEER) Developmental Research Center
 AHRQ P20HS011552
 PI
 Established center for research in diagnostic errors (only 1/93 AHRQ Safety grants focused on diagnosis) that featured multiple projects including electronic linking of lab and pharmacy data to identify errors, case series of hundreds of diagnostic errors, development of the DEER taxonomy tool for classifying errors.

2002	Breakthrough Series on Improving Care to Chronically Ill – Congestive Heart Failure Collaborative. IHI project Funded by Robert Wood Johnson PI for Participating Site Scholarship Award Chronic disease improvement for diabetes and hypertension patients to determine if multifaceted intervention could decrease ED visit and readmissions
2004-2005	Harvard-Cook County Solid Oral Dose-form Identification Study United States Pharmacopeia Inc. / American Society of Health Systems Pharmacists (ASHP) Foundation Co-PI (w/ David Bates) Studied clinicians' ability to use pill imprint codes to identify solid oral dosage forms pills in 2 clinician settings (Cook County; Brigham) demonstrating inability to do so and need for universal imprint coding system which worked on in coordination with United States Pharmacopeia Inc.
2005-2006	Medication Reconciliation regional medication safety initiative Michael Reese Health Trust Co-PI (w/ Bruce Lambert) Enhancing communication and coordination between hospital-based clinicians, community pharmacies, and outpatient physician offices.
2005-2007	DECIDE (Developing Evidence to Inform Decisions about Effectiveness) Network AHRQ Chicago DECIDE Research Center, University of Illinois at Chicago Center for Pharmacoconomics Research Co-investigator (PI Glenn Schumacher) Series of pharmaco-economics literature reviews related to medication effectiveness and formulary decision-making.
2006-2008	Formulary Leveraged Improved Prescribing (FLIP) Project. Cook County Stroger Hospital / UIC College of Pharmacy and Department of Medical Education PI Attorney Generals' Consumer and Prescriber Grant Program: The Marketing of Medicines: Development, Dissemination and Evaluation of a Critical Skills Curriculum for Prescribers.
2007-2009	Closing the Feedback Loop to Improve Diagnosis AHRQ R18HS017060 Co-investigator (PI Eta Berner) Build an interactive voice response system to follow-up on patients seen in 3 urgent care clinics at University of Alabama and demonstrated feasibility of and value of such automated follow-up systems.
2008-2009	Using Feedback to Close the Loop on Diagnosis Errors at Brigham and Women's Hospital and Clinics CRICO-Harvard Risk Management Foundation PI Detailed surveillance system to identify diagnostic errors and feedback findings of case review to upstream providers.
2008-2012	Tools for Optimizing Prescribing, Monitoring, and Education (TOP-MED)

	AHRQ U18HS016973 Clinical Director (PI Bruce Lambert) AHRQ CERT (Center for Education and Research in Therapeutics) 5 Projects testing high leverage tools to improve safety of medication use including: formulary oversight, conservative prescribing culture, N of 1 Trial (for gabapentin), pharmaco-economic analysis of formulary applications.
2009	Patient Safety Interventions to Reduce Diagnostic Error in the Ambulatory Setting AHRQ Action Master Task Order Mechanism HHSA290200600001 Task 8 Technical expert panel (PI Mark Graber) Literature review on cognitive and systems approaches to decreasing diagnostic errors in ambulatory care
2010-2011	Evaluation of Primary Care Practice Transformation Efforts Commonwealth Fund PCMH Process/Implementation Evaluation Working Group Chair, Qualitative Evaluation Working Group (PI David Bates) Evaluation of multiple sites efforts to establish patient centered medical homes. Conducted qualitative evaluation of 5 clinic sites in several clinic networks in NY and MA.
2010-2011	Evaluating the Impact of Computerized Physician Order Entry Systems on the Quality, Safety, and Cost of Care in Massachusetts Community Hospitals Commonwealth Fund Co-investigator (PI David Bates) Before and after comparisons of frequency of medication errors in community hospitals following implementation of electronic medication ordering (CPOE)
2010-2011	Analysis of CPOE-related errors reported to USP's MEDMARX error-reporting system National Patient Safety Foundation PI Review of 2.5 million medication error reports for CPOE related errors, with detailed review of 10,000 selected reports followed by testing current systems' vulnerabilities to the errors identified in the reports.
2010-2012	Advancing Clinical Decision Support (ACDS): Key lessons in clinical decision support implementation RAND-BWH Contract, Office of the National Coordinator, American Recovery and Reinvestment Act Task 3 Team member / Subtask 3.3 Team Leader (PI Douglas Bell and Blackford Middleton) Led literature and consensus development for theoretical constructs (schema) for clinician decision support models to aid in Roll out of effective CDS interventions
2010-2013	PROMISES (Proactive Reduction in Outpatient Malpractice: Improving Safety Efficiency and Satisfaction) Malpractice & Safety Project AHRQ R18HS019508 Clinical and Research Director (PI Madeleine Biondolillo)

	Randomized trial of multiple quality improvement interventions for decrease patient safety and malpractice risk in small and medium size primary care practice across Massachusetts.
2011-2012	<p>Relationship Between Documentation Method and Quality of Visit Notes Partners Siemens Research Council Investigator (PI David Bates)</p> <p>Developed and validated instrument for chart review of electronic notes and correlation with quality indications</p>
2011-2015	<p>Project 2 E-pharmacovigilance – Calling for Early Detection of Adverse Reactions (CEDAR) Project. AHRQ HIT CERT (Health Information Technology Center for Education and Research in Therapeutics) U19HS021094-05 Component Project PI (PI David Bates)</p> <p>Cluster randomized trial of using interactive voice response technology coupled with live pharmacist support to automatically screen patients newly started on medications for hypertension, diabetes, depression and insomnia in 14 primary care clinics, to conduct pharmaco-epidemiologic surveillance for adverse reactions and assist patients reporting reactions.</p>
2011-2015	<p>Tools for optimizing medication safety (TOPMEDS) AHRQ U19HS021093 Co-investigator / Senior consultant (PI Bruce Lambert)</p> <p>AHRQ CERT Center grant for 4 projects to develop tools to enhance medication safety including tool to screen for Drug Name Confusion, safe opioid dosing, patient education leaflet projects.</p>
2012-2014	<p>Brigham Computerized Prescriber Order Entry Medication Safety Project (CPOEMS) US FDA - Task Order Proposal: Contract Number HHSF2232010000081 Computerized Physician Order Entry (CPOE) System Task Order Contract Project PI</p> <p>Multisite FDA-requested project to examine patient safety vulnerabilities of CPOE systems using multiple methods including direct observation of 10 CPOE systems, on site interviews, review of help desk and patient safety logs, analysis of medication orders discontinued in error.</p>
2014-2015	<p>Automated Surveillance for Medication Errors and Adverse Reactions MedAware PI</p> <p>Evaluation of advanced artificial intelligence commercial software screening program to assess accuracy, validity, and usefulness of alerts, as applied to large BWH outpatient drug database for 5 year period.</p>
2014-2016	<p>Understanding and Preventing Diagnostic Pitfalls CRICO PI</p> <p>Developed new construct of “Diagnostic Pitfalls” and collected pitfalls from literature, safety reports, specialty focus groups, and malpractice cases</p>
2014-2016	<p>HIT Safety Retract and Reorder Wrong Patient Errors AHRQ R01 HS024945</p>

	<p>Co-investigator (PI Bruce Lambert) Studying two types of self-interception events 1) abandon-and-reorder and 2) retract-and-reorder events following indications based (drug indication mismatch) decision support alerts in two CPOE implementations</p>
2014-2018	<p>Enhancing Medication CPOE Safety & Quality by Indications Based Prescribing AHRQ R01HS023694 PI 4 year project to examine rationale, feasibility, barriers to redesigned prescribing that incorporated drug indications, culminating last 2 years with design and testing of indications-based CPOE prototype that was compared head to head with 2 leading EMR vendors' CPOE system and found safer, more efficient and preferred by physicians.</p>
2014-2022	<p>Engineering High Reliability Learning Lab: Engineering Highly Reliable Communication and Coordination Systems for High Risk Patients, Referrals, and Tests AHRQ P30 1P30HS024453-01 Co-investigator / Core team member (PI Sara Singer) Collaboration with Northeastern Engineering School to use high reliability methods to drive 4 quality improvement projects-opioid prescribing (at BWH), scoliosis spine surgery (Boston Childrens), out of network referrals (Atrius), discharge planning/coordination (Mt Auburn Hospital).</p>
2015-2017	<p>Clinician-Patient Relationships: Boundaries, Barriers, Breakdowns Arnold P Gold Foundation for Medical Humanism / Lucian Leape Family Foundation PI a) National AMA Masterfile random sample survey of primary care physicians attitudes and behaviors regarding physician-patient boundaries and b) review of 500 "patient terminations" in a large primary care research network.</p>
2015-2020	<p>Delivering safe and effective test result communication, management and follow-up Australian Government National Health and Medical Research Council Consultant (PI Andrew Georgiou) Multi-project initiative to conduct literature review, study issues and performance of test results management systems in multiple hospitals in Australia</p>
2016-2019	<p>Primary-care Research in Diagnosis Errors (PRIDE) learning network Gordon and Betty Moore Foundation PI Established collaborative network of patient safety organizations, malpractice insurers, academic partners to review primary care diagnostic error cases; international consensus panel to draft principles for conservative diagnosis, work on diagnostic pitfalls taxonomy and coding of error cases.</p>

2017-2021	Tools for Improving Primary Care Diagnostic Safety CRICO PI Development and testing of five tools to enhance ambulatory diagnosis and decrease diagnostic errors: a) communicating diagnostic uncertainty to patients, b) PSA shared decision-making and documentation, c) laboratory based formatted report of abnormal lab test results, d) colonoscopy ordered: performed metric database reporting, e) assessing the Assessment
2019-2022	Safely Improving Emergency Diagnostic Testing through Clinical Safe Harbors AHRQ R18HS025931 / Vanderbilt University Medical Center Co-Investigator / Steering committee / Expert panel (PI Allan Storrow) Creation of clinical practice guidelines to permit clinicians to safely avoid defensive medicine practices related to inappropriate imaging and other diagnostic testing in the Emergency Department.
2019-2022	MD SOS: Measuring Diagnosis: Safety or Stress CRICO PI (\$199,338) Ambulatory diagnostic safety study correlating diagnostic process quality with clinician burnout.
2017-2022	Preventing Wrong-Drug & Wrong-Patient Errors with Indication Alerts in CPOE Systems AHRQ U19HS021093 Co-Investigator (PI Bruce Lambert) Evaluate use of indication-based alerts to warn prescribers about potential medication errors, particularly look-alike sound-alike errors in several hospitals in NY and Chicago.

Current

In no cost extension final year:

2017-2024	Conservative Prescribing: Prescriber Profiling and Education Project Gordon and Betty Moore Foundation PI (\$2,024,425) Collaboration with VA, University of Illinois at Chicago, Northwestern to develop and measure metrics to characterize prescribing variations and extent to which they conform to 24 conservative prescribing principles. Creation and deployment of IHI Open School course on Conservative Prescribing: 4 lesson course.
2018-2024	Monitoring for Adverse Drug Events Gordon and Betty Moore Foundation PI (\$1,499,662) Building on prior successful automated screening RCT we performed using interactive voice response surveillance coupled with live pharmacist support, this project extends this screening to use of patient portal and text messaging to

patients newly started on medication in primary care clinics. Coupled with work on new conceptual model for characterizing the dimensions of adverse drug reactions.

2019-2024 Primary-care Research in Diagnosis Errors (PRIDE 2) learning network
Gordon and Betty Moore Foundation
PI (\$759,916)
Continuation of PRIDE diagnostic errors identification, analysis, sharing network. Creation of PRIDE Toolkit for organizations to use to assess, learn from, and prevent diagnostic errors. Convening of international expert panel to develop consensus guidelines for standards for standardized synoptic interoperable reporting and sharing of diagnostic error cases.

2019-2024 Closed Loop Diagnostics: Patient Safety Engineering Learning Laboratories
AHRQ R18HS027282
Multi-PI (with Russell Phillips, James Benneyan) (\$628,000)
Using high reliability engineering design principles and practices, create more reliable systems for following up test results, ensuring critical referrals, and tracking symptoms to ensure that loop is closed on outstanding labs, referrals, and symptoms. Using BI- Health Care Associates, Bowdoin Health Center, and as learning/testing sites.

Active Funding

2021-2024 Creating a highly reliable sign and symptom tracking system to prevent delays in cancer diagnosis
CRICO
Co-Investigator (PI: Tayla Salant)
Project will design novel methods to automate tracking of symptoms that are potential symptoms of cancer (including colon, skin cancer), and engineer reliable safety nets to decrease likelihood that they will have failures or delays in follow-up. To be implemented in community clinic serving historically marginalized populations who experience cancer delays.

2022-2026 ACHIEVING BETTER CANCER DIAGNOSIS (ABCD): Identifying, supporting, and learning from marginalized patients who experience delayed cancer diagnosis. Also titled: ICDx (Improving Cancer Diagnosis).
Agency for Health Care Research and Quality R18 -1R18HS029344-01
(\$3,963,836)
Multi PI (with Thomas Gallagher Univ. Washington)
The BWH-Univ Washington Diagnostic Center of Excellence (DCE) will focus on detecting in real time patients with delayed diagnosis of cancer especially among marginalized patients, and then learning from them about what went

wrong, how delays could be avoided, and strategies to mitigate any harm that has occurred. We will integrate expertise on safety science, diagnosis improvement, and Communication and Resolution Programs (initiatives to detect and empathically respond to harm events).

2024-2028 Time for Better Diagnosis: Measuring Outcomes Stress and Time (MOST)
R01 HS030232-01).
PI (1,987,526)
Multisite 4 year project with Hennepin County Health Care and Northeastern University Dept of Systems Engineering to identify patients with diagnostic visits and solicit their feedback on diagnostic processes and outcomes. Also to collect and analyze data examining relationships between EMR-measured time, clinician stress, and diagnostic assessments (produced by both clinician entry and ambient artificial intelligence documentation notes).
More Reliable And Timely Diagnosis Of ADR's In Older Patients
PI (\$100,000)

2024-2026 Institute for Healthcare Improvement (IHI)/Hartford Foundation Diagnostic Excellence— Age Friendly Health Systems (DxEx-AFHS) Grant.
18-month project to conduct adverse drug reaction surveillance in older adults newly prescribed high-risk medications using innovative electronic outreach tools coupled with live clinical pharmacist support. An additional aim will leverage linkages between electronic laboratory and pharmacy data to detect signals of potential adverse drug reaction and where warranted alert clinicians and patients.

Report of Local Teaching and Training

Teaching of Students in Courses

HMS

2015	Patient-Doctor II Observed Midterm H&P Exam	HMS 4 hours
2016	Patient-Doctor II Course – Proctor: Observed Final H&P Exam -	HMS 4 hours
2018-	HQS 706: Special and Emerging Topics in Patient Safety and Quality MHQS students	HMS 10 course lectures (16 hours/yr for 2019-2025)
2020	HMS Advanced Clinical Content and Skills -Selective Session	HMS 1.5 hours

Formal Teaching of Residents, Clinical Fellows and Research Fellows (Post-docs)

2011	Primary Care Lecture Series on Quality Principles	BWH 2 hours
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	BWH residents	
2013-	Lecturing, mentoring Harvard (CRICO) Patient Safety Fellows	HMS 6 hours
2015	Symposium faculty/discussant, final projects presentation	HMS 3 hours
2016	HMS Patient Safety and Quality fellows Panel Speaker, Integrating Advocacy into Healthcare Careers	HMS / Boston Children's Hospital 1 hour
	HMS General Medicine fellows, BCH	
	Pediatric Health Services Research fellows	
2017-2018	Understanding Diagnostic Errors Faculty presentation at intern retreat Partners interns	Partners HealthCare 3 hours
2017- 2025	Chair/Presentation of selected Ambulatory M&M Conferences on Diagnostic Error, Medication Safety	BWH 3 hours
2018	Primary Care Residency Block trainees Diagnostic Errors Oral Surgery Residents Conference. BWH	BWH 1 hours
	Oral Surgery residents	
2019	Diagnostic Errors: How to Recognize and Prevent them. BWH Primary Care residents	BWH 2 hours

Clinical Supervisory and Training Responsibilities

1984-2006	Faculty/Preceptor/Lecturer. Fantus General Medical Clinic Medical Residents and Specialty Fellows	Cook County Hospital 8 hours per week
1997-2001	Workshop leader/ Dept of Family Practice Faculty Development Program Quality Improvement module	Cook County Hospital Total contact time 10 hours
2008-2010	Preceptor Brigham Internal Medicine Associates (BIMA) 3-5 BWH internal medicine residents	BWH 4 hrs/wk
2008-2013	Inpatient Ward Supervising Attending Medical Residents, HMS Students	BWH 2-4 wks /year
2010-2012	Preceptor Brigham Internal Medicine Associates (BIMA) Phyllis Jen Center for Primary Care BWH Medical Residents	BWH 1 week/yr plus as needed supervising sessions
2011	Clinical shadowing mentor in Phyllis Jen Center for Primary Care 4 th year Massachusetts College of Pharmacy and Health Sciences students	BWH 6 hours/yr

2013-2016	<i>Ad hoc</i> Preceptor, Phyllis Jen Center for Primary Care BWH Medical Residents	BWH Average 8-10 4-hour supervising sessions per year
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Laboratory and Other Research Supervisory and Training Responsibilities

2008-	Research supervision Fellows, visiting researchers	BWH 1-2 hours per week
2016-2024	Reviewer / mentor / advisor for masters in Safety Quality Informatics Leadership (SQIL) capstone projects 3-6 students per year	HMS 12-16 hours/year

Formally Supervised Harvard Medical, Dental and Graduate Students

2014-2015	Ben Gross Clinical Informatics HMS Fellowship in Biomedical Informatics Class of 2015. Thesis Advisor Automated System for Gathering and Reporting Clinical Outcomes to Providers. Master thesis Committee Advisor,
2015-2016	Baker Hamilton. Class of 2016. Clinical Informatics HMS Fellowship in Biomedical Informatics. Building a Mobile DxPlain App. Lessons Learned and Application to NEJM 2015 CPC Cases. Master thesis Committee Chair.
2017-2018	Mark Johnson. Masters Program Class of 2019. HMS Master's Thesis Committee Chair. On Uncertainty in Medicine
2017-2018	Helen Jack Class of 2018. Mentored on project and publication on role of Morbidity and Mortality conferences in undergraduate education.
2017-2018	Alissa Grotisser Class of 2018. Senior Year research mentor. a) Patient terminations project. b) Communicating uncertainty with patients and clinicians. c) Quality of diagnostic assessments in clinical documentation. Took 3 rd year off to work with me on several projects including project on Patient Terminations, and one on Communicating Diagnostic Uncertainty to Patients in Primary Care, Galina Gheiman HMS Student M3 Class of 2019. Quality Improvement mentor. Mentored 3 rd -4 th year projects related to QI, manuscript prepared for submission.
2017-2019	Mentored student in role as TA for HMS MQS 706 master's course I am directing Sarib Hussain HMS 2020. Mentoring for project related to assessing the quality of diagnostic assessments in primary care urgent care visit documentation,
2019-2021	Abid Hasan MD. HMS Masters Quality and Safety Student. Mentorship for various quality and safety projects during and since the course.
2020 -2022	Tiantian White HMS 2021. Mentoring for quality improvement project, elective focused on closing the loop on testing, referrals, symptoms at Beth Israel HCA clinic.
2020-2022	Takashi Watari, MD, Ph.D., DTMH, MS, MCTM. Associate Professor Shimane University Hospital Japan. HMS Masters in Quality and Safety student. Mentored several projects related to diagnostic errors.
2021-2022	Sally Bloomberg MBA, BA. Mentor Harvard Advanced Leadership Initiative. Supervised auditing HMS Masters in Safety Course.
2022	

2022-2023 Andrea McHugh RN. HMS Masters in Quality and Safety 2021-22 class. Capstone Project mentor for design and implementation of diagnostic error risk management program for Summit Health.

Other Mentored Trainees and Faculty

1987-1989 Jay Shannon, MD / Former CEO, Cook County Health & Hospitals System
Career stage: junior faculty. *Mentoring role:* clinical and administrative mentor.
Accomplishments: mentoring in quality improvement and clinic operation and administration at Fantus Clinic, Cook County Hospital; served as CEO of Cook County Health System.

2008-2010 Omar Hasan, MD, MPH / Chief Quality Officer, Maine Medical Center
Career stage: BWH Internal Medicine fellow. *Mentoring role:* fellowship mentor. *Accomplishments:* named Vice President for Quality, American Medical Association.

2008-2011 Robert El-Kareh, MD, MPH / Associate Professor of Medicine, UC San Diego
Career stage: BWH Clinical Medical Informatics fellow. *Mentoring role:* faculty/project mentor. Associate Professor Biomedical Informatics and Hospital Medicine.

2011-2012 James Hudspeth, MD / Assistant Professor of Medicine, Boston University School of Medicine
Career stage: BWH Internal Medicine resident. *Mentoring role:* research project mentor. *Accomplishments:* diagnosis error clinical research project. Hospitalist and lead physician for 2020 Boston Medical Center COVID response team.

2011-2012 Jennifer Boehne, PharmD / Senior Advisor, Retail Operations, CVS Health
Career stage: BWH Pharmacy Informatics and Outcomes Research fellow.
Mentoring role: Medication error database review study mentor. Safety and Reliability Advisor California Hospital Patient Safety Organization (CHPSO),Senior Advisor CVS.

2010-2012 Valeria Pazo, MD/ Hospitalist at Yale New Haven Health Northeast Medical Group Greenwich, CT
Career stage: Post-doctoral fellow. *Mentoring role:* research project mentor.
Accomplishments: weight loss informatics project. Educational leader at BWH Brigham Education Institute and BWH hospitalist.

2012-2015 Joshua Liao, MD / Assistant Professor of Medicine, University of Washington School of Medicine; Director, Value and Systems Science Lab; Medical Director, Payment Strategy, UW Medicine
Career stage: Foundation for Creative Achievement Award in Primary Care Diagnostics fellow. *Mentoring role:* fellowship mentor. *Accomplishments:* research on diagnostic errors at BWH.

2013-2014 Sarah Slight, PhD / Reader in Pharmacy Practice, Newcastle University, UK
Career stage: HMS visiting research scholar, BWH Center for Patient Research and Practice fellow. *Mentoring role:* research mentor. *Accomplishments:* multiple medication safety research projects.

2013-2025	Tewodros Eguale, MD, PhD / Associate Professor of Pharmaceutical Economics and Policy and Director of Assessment, Massachusetts College of Pharmacy and Health Sciences <i>Career stage:</i> BWH/McGill CUR-IT postdoctoral fellow. Currently Professor of Epidemiology and Biostatistics Massachusetts College of Pharmacy and Health Sciences. <i>Mentoring role:</i> clinical research mentor. <i>Accomplishments:</i> multiple medication safety projects, publications, presentations, ongoing collaborations.
2015-2025	Harry Reyes Nieve, MAS / Visiting Postgraduate Research Fellow, BWH/HMS; PhD candidate, Medical Informatics, Columbia University, New York, NY <i>Career stage:</i> BWH administrative assistant. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> enrolled in Master of Applied Science program at Johns Hopkins; multiple coauthored papers.
2016-2019	Elise Ruan, MD / Informatics Fellow Columbia University. Resident, Montefiore Medical Center, Bronx, NY <i>Career stage:</i> Tufts medical student. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> Mentored multiple projects and publications on diagnostic errors and pitfalls.
2017-2019	Sumit Agarwal, MD / Instructor, part-time, Medicine, HMS; Associate Physician, General Internal Medicine, BWH <i>Career stage:</i> BWH General Medicine fellow. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> multiple projects, presentations, and publications related to diagnostic errors.
2017-2025	Isaac Chua, MD / Physician, Palliative Medicine, Dana-Farber Cancer Institute; Instructor, Medicine, HMS <i>Career stage:</i> HMS/CRICO Quality and Safety fellow. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> 2 studies related to quality improvement for Urine tox drug screens.
2018-2020	Andrea Lim / Resident Kaiser Health System. Medical student, Tufts University School of Medicine <i>Career stage:</i> Tufts medical student. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> multiple projects with a focus on diagnostic errors, malpractice claims, and primary care quality improvement.
2018-2024	Narath Carlile, MD, MPH / Instructor, Medicine, HMS; Associate Physician, General Internal Medicine, BWH; Director of Clinical Practice Innovation in Patient Goal Centered Care and Wellness. Director of Safer Opioid Prescribing Task Force, Engineering High Reliability Learning Lab; Director of Innovation, Internal Medicine Residency. <i>Career stage:</i> junior faculty. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> multiple projects including opioid improvement, diagnosis safety (PRIDE Project co-investigator, IT interventions.
2019	Amy Zanoni, PhD / Postdoctoral Fellow, Southern Methodist University <i>Career stage:</i> PhD student, Rutgers University. <i>Mentoring role:</i> consulting research advisor. <i>Accomplishments:</i> PhD from Rutgers History Department project on history of Chicago public hospital 1950-2000; provided written materials, reviewed proposal and drafts, gave background material.

2019-2020	Diana Norwich / Medical student, Tufts University School of Medicine <i>Career stage:</i> Tufts medical student. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> multiple projects with a focus on medical safety and improving prescribing appropriateness.
2019-2020	Aimie Li / Master's student, Epidemiology, HSPH <i>Career stage:</i> HSPH master's student. <i>Mentoring role:</i> thesis practicum mentor. <i>Accomplishments:</i> epidemiology research on diagnostic errors and delays in sepsis patients in Ottawa and BWH.
2019-2025	Maram Khazen, PhD / BWH visiting postdoctoral researcher from Tel-Aviv University, Israel <i>Career stage:</i> visiting postdoctoral researcher. <i>Mentoring role:</i> research mentor. <i>Accomplishments:</i> multiple project related to primary care physician-patient communication, medication safety, and diagnostic errors.
2020-2022	Dr. Saina Aminmozaffari – Iranian MD; training in diagnostic error coding and career support for U.S. residency application training.
2020-2022	Thomas Radomski, MD / Assistant Professor of Medicine, University of Pittsburgh School of Medicine, Pittsburgh, PA <i>Career stage:</i> junior faculty. <i>Mentoring role:</i> K23 advisory committee for project Low-Value Prescribing <i>Accomplishments:</i> create metrics for searchable triggers for inappropriate medication prescribing and candidates for de-prescribing.
2020-2022	Joe Willis, MD / ABMS fellowship (project on Telehealth and Diagnosis safety) <i>Career stage:</i> Postdoctoral visiting fellowship. <i>Mentoring role:</i> Primary mentor <i>Accomplishments:</i> Awarded ABMS fellowship; preparing qualitative study featuring literature review and field note regarding diagnostic issues in post COVID telemedicine primary care practice.
2021-2025	Carl Berdahl, MD, MS. Cedars-Sinai Medical Center / UCLA / RAND. Society for Improving Diagnosis in Medicine (SIDM) Fellowship mentor and K award application advisor to study frequency, contributors and patient experiences with diagnostic errors among adults discharged from the emergency department.
2021-2025	Mei-Sing Ong, PhD. Assistant Professor Department of Population Medicine Harvard Pilgrim Health Care Institute (collaboration between Harvard Pilgrim Health Care and Harvard Medical School) and Boston Children's Hospital. Mentoring Role: Supervising various projects and papers and grant submission related to Diagnostic Delay in Juvenile Idiopathic Arthritis. <i>Accomplishments:</i> Multiple Several publications and grant submissions combining big data epidemiology with clinical research in JRA.
2021-2025	Allyson Bontempo. School of Communication and Information Rutgers PhD <i>Career stage:</i> PhD candidate <i>Mentoring role:</i> PhD candidate advisor mentoring research related to diagnostic errors in endometriosis diagnosis focusing on dismissal of women patients' symptoms. <i>Accomplishments:</i> Several publications of qualitative interviews and presentations on experience of women experiencing diagnostic delays with endometriosis. Now broadening to several additional diagnoses.
2021-2024	Eliezer Shinnar. Society for Improving Diagnosis in Medicine Fellowship

	<i>Career Stage:</i> Junior faculty <i>Mentoring role:</i> Fellowship primary mentor. Mentoring project related to Indian Health Service diagnostic errors in patient transfers in and out of community level hospital. <i>Accomplishments:</i> Playing leadership role in local hospital in quality improvement initiatives around patient transfers.
2020-2024	Talya Salant PhD. Medical Director of Community Health Equity and Research at Bowdoin St. Health Center, a community health center in Dorchester, MA. Mentored for application and conduct of CRICO sponsored research grant on designing and testing a symptom follow-up tracking in 2 medical clinics.
2022-2024	Christina Cifra MD. MS. Member of the Faculty, Department of Pediatrics, Boston Children's Hospital Career Stage: Junior Faculty. <i>Mentoring Role:</i> Mentorship, supervised several grand proposal related to diagnostic uncertainty in the ICU setting. <i>Accomplishments:</i> Co-Chaired International Diagnostic Error in Medicine Meeting 2022, Submitted CRICO proposal on Identification and Communication of Diagnostic Uncertainty to Prevent Diagnostic Error in Intensive Care.

Formal Teaching of Peers

No presentations below were sponsored by outside entities.

1989-1991	Clinical Decision Analysis, Clinic Prediction Rules, Receiver Operating Characteristic (ROC) Curves: Clinical Decision-Making Course Cook County Graduate School of Medicine Postgraduate Education	Faculty 3 lectures; each repeated twice
2008	Diagnosis Errors in Medicine The Patient Safety Imperative HMS / BWH / BIDMC	Single presentation Boston, MA
2009	EHR Solutions for Reducing Errors and Transforming Healthcare Quality Patient-Centered Computing and e-Health: Transforming Healthcare Quality HMS / Partners HealthCare Clinical Informatics Research and Development	Workshop faculty Boston, MA
2009	Diagnosis Errors Strategies for Prevention Strategies 2009 Annual Patient Safety Summit: Engineering Good Ideas HMS / CRICO Harvard Risk Management Foundation (RMF)	Workshop faculty Boston, MA
2013-2015, 2017, 2020, 2021, 2022	Panel Moderator for Lung Cancer; Colorectal Cancer (2013 –2015); Model M&M Conference (2014-2015); Breast Cancer Screening (2017); COVID Infections and Diagnosis Errors (2020)	1hour of lectures/year Boston, MA

	Best Medical Practices: Maximizing Skills, Minimizing Risk, Diagnostic Pitfalls (2021) HMS / CRICO Risk Management Foundation	
2014-2016	Academic Improvement Collaborative Learning Sessions (workshops on colorectal cancer, breast cancer screening, quality improvement) HMS Center for Primary Care	Workshop faculty Cambridge, MA
2016	Teaching Clinical Skills OSTE. HMS Simulation Center HMS Center for Primary Care	Faculty Boston, MA
2015, 2017, 2019, 2021, 2022-2024	Quality, Informatics and Leadership (SQL) Program. HMS Office of External Education Diagnosis Errors in Medicine. Medication Safety.	1 webinar (2015) 1 lecture (2017) 4 lectures (2019) Boston, MA / London, UK 3 Webinars (2021) 2 Webinar lectures (2023-24)
2018-2024	What you Need to Know about Diagnostic Errors in Medicine HMS Intensive Review of Internal Medicine	Annual presentations at BWH Internal Medicine Review Course Boston, MA

Local Invited Presentations

No presentations below were sponsored by outside entities.

1990	The Healthcare Summit and the Future of Healthcare/ Lecturer
1991	Rush University Health Systems Management Graduate Seminar
	Past, Present, and Future, Rush University Health Systems Management Graduate Seminar Cook County Hospital
1995	Lessons from Drug Utilization Evaluation/ Speaker Cook County Hospital
1995	Glucose Control in Diabetes Mellitus: How Tight is the Case?/ Lecturer
	St. Luke's Section of General Internal Medicine/ Cook County Hospital
	General Medicine/ Primary Care
1996-2007	Cook County Hospital OB-GYN Dept. Annual Research Symposium/ Review Committee Judge & Guest Discussant
1999	Uncovering and Prevent Errors in Prison Health Setting/ Lecture Cermack Health Services
2001	Today's Speech: speech recognition in medicine: is it ready for prime time?/ Lecture
	Rush Medical College
2001	Medical Errors: Beyond M & M/ Lecture
	Cermack Jail Hospital

2001	Errors and the Practice of Immunology, Rush Section of Allergy and Immunology Special Lecture Series/ Lecture Rush Medical College
2002	Linking Lab, Pharmacy and the Clinicians/ Lecture Cook County Hospital
2004	What is QA/QI for Underserved?/ Presentation Cook County Hospital
2004	Improving Health Care. Eight Forty-Eight Chicago Public Radio. 10/16/04
2003	Developing a National Action Agenda for the National Health Information Infrastructure: Report from the NHII Summit/ Presentation Rush Medical College/ Cook County Hospital
2005	Take the Pledge. Pharma Free Week/ Presenter Rush University
2005	Diagnosis Delay in a Patient with Spinal Epidural Abscess/ Medical Grand Rounds Cook County
2005	Operational Failures in Follow-up of Abnormal Test Results/ Medical Grand Rounds Cook County Hospital
2007	Primary Care-International Issues-The Work of Barbara Starfield/ Presenter Brigham and Women's Hospital
2008	Diagnosis Errors: Going Beyond Medication Errors for Patient Safety/ Presenter Brigham Center for Patient Safety Research and Practice
2008	Leveraging Electronic Utilities and Resources to Improve Personal and Research Productivity/ Presenter. Brigham and Women's Hospital Division of General Medicine Research Seminars
2009	Lessons from Risk Management and Diagnosis Errors in Medicine Brigham and Women's Hospital Harvard Medical School
2009	Promoting More Conservative Prescribing 2/18/2009 Presentation to Division of Pharmacoepidemiology and Pharmacoeconomics Department of Medicine Brigham and Women's Hospital Harvard Medical School
2009	Partners Healthcare Clinical Informatics Research and Development (CIRD) Informatics Seminar. Presentation Electronic Clinical Documentation: It's Role in Diagnosis Error and Improvement
2009	Building on Legacy of the Lown Group: 25 principles for more conservative prescribing. Lown Cardiology Group.
2010-	Co-Chair BWH Primary Care Morbidity and Mortality (M&M) Conference Quarterly. (2-3 conferences chaired /presentations annually)
2012	Special Ethics Grand Rounds: Professional-Patient Boundaries: When Does Helping Patients Cross the Line?" BWH Medical Ethics Dept Lecture Series.
2012	Cuba's Health: Reflections and Review of Medical and Economic Conditions. BWH Division of General Medicine Presentation. 7/12
2012	Professional-Patient Boundaries: When Does Helping Patients Cross the Line. BWH Ethics Symposium.
2013	MGH Stoeckle Center Schwartz Center Rounds for the Primary Care Community. Tis the Season to Give, but...Boundary Issues for the Primary Care Relationship. 12/18/ 2013
2014	Physician –Patient Boundaries. BWH Behavioral Neurology Conference. 3/14

2014 Guest Discussant. Beth Israel Deaconess Hematology-Oncology Tumor Board
M&M 12/1/14

2014 Optimizing HIT for Cancer Screening and High-risk Orders
Closing the Loop. Ryan's Story. Presentation to Harvard Center for Primary Care Academic Improvement Collaborate Learning Session. Cambridge.
6/12/14

2014 Using a Driver Diagram to Connect the Dots. (w/ A. Ellner, T. Bearden).
Presentation to the Harvard Center for Primary Care Academic Improvement Collaborate Learning Session. Cambridge. 11/1/14

2017 Diagnostic Error in Medicine: Understanding and Implementing the Institute of Medicine (IOM/NAS) Report on Improving Diagnosis / Grand Rounds
Division of General Medicine, Beth Israel Deaconess Medical Center, Boston, MA

2017 Tribute to Ryan Wanniger-Extraordinary Patient,
Dana-Farber Cancer Institute, Boston, MA

2018 Improving Care for Colorectal Cancer Screening. AIC CARES presentation to CRICO Operations Committee. 2/1/18/

2018 Building A Better CPOE System: Comparing An Indications-Based Medication-Ordering Prototype To Leading Commercial CPOE Systems
RSS 3082: Harvard Clinical Informatics Series 2/6/2018

2018 New Harvard Malpractice Study. VIDS Table Content Lead, CRICO

2018 Patient Terminations / Invited Presentation
HMS Center for Primary Care, Boston, MA

2018 Principles of Conservative Diagnosis: Special Edward P. . Center for Quality and Safety Journal Club 12/19/18.
Massachusetts General Hospital, Boston, MA

2019 Diagnostic Errors: Adult and Pediatric Issues / Invited presentation
Safety & Quality Forum, Boston Children's Hospital, Boston, MA

2019 Engineering High Reliability/Critical Junctions Learning Lab (EHRL) Learning Session #10.
HMS Center for Primary Care / Harvard T.H. Chan School of Public Health, Boston, MA

2019 Proud to Be GIM / Discussion table faculty leader
HMS Center for Primary Care, Boston, MA

2019 Conceptualizing Flow as a Change Idea / Invited presentation
Research Executive Council, BWH Center for Patient Safety, Boston, MA

2020 Diagnostic Errors: State of the Art / Medical Grand Rounds
Harvard University Health Services, Cambridge, MA

2023 Improving Diagnosis 2023:
Culture, Contributions, and Conundrums
at BIDMC and Beyond. Mark Aronson annual endowed quality lectureship.
<https://vimeo.com/791960525>
Medical Grand Rounds, BIDMC, Boston, MA

2023 Introduction to Diagnostic Errors in Medicine / Invited presentations
Social Medicine Special Conference, Cambridge Health Alliance.

Report of Regional, National and International Invited Teaching and Presentations

Invited Presentations and Courses

Those presentations below sponsored by outside entities are so noted and the sponsor(s) identified.

Regional

1984	Health Care to the Poor in the U.S. / Lecturer University of Chicago Medical School, Chicago, IL
1984	Underserved Areas: Urban Health Problems in the City of Chicago/ Lecturer University of Illinois College of Medicine, Chicago, IL
1985	Analysis of Dumping Patterns and Implications for Current Crisis at Cook County Hospital/ Presentation College of Pharmacy, University of Illinois, Chicago, IL
1985	Public Hospitals- The Case of Cook County Hospital, Health Care and the Poor Course/ Lecturer. University of Chicago Medical School, Chicago, IL
1988	Medical Informatics: Personal Filing System for Residents/ Lecturer. Michael Reese Medical Center Primary Care Series, Chicago, IL
1989	Introduction to its History and Future/ Lecturer, site coordinator University of Chicago
1989	National Health Program: Physicians' View/ Presentation. Illinois Department of Public Health Annual Meeting, Chicago, IL
1989	What is Clinical Decision-making/ Presenter. Chicago Medical Society, Chicago, IL
1989	The Need for a National Health Program/ Lecture DePaul University Master of Public Service Course, Chicago, IL
1989	Introduction to Decision Analysis: The Amphotericin Case/ Medical Grand Rounds Christ Hospital, Oak Lawn, IL
1990	Realities of Medicine Course: Access to Health Care/ Lecturer University of Illinois College of Medicine at Chicago, Chicago, IL
1990	When to Operate for BPH: Insights from Decision Analysis/ Presentation University of Illinois at Chicago, Section of General Medicine Research Conference, Chicago, IL
1990	Public Sector Medical Services/ Presentation Center for Civic Leadership, Chicago, IL
1990	The Health Services Research Article of the Year: Evaluation of the Value of Prostatectomy/ Presenter Michael Reese Medical Center Primary Care Seminar Series, Chicago, IL
1991	Illinois Physicians for a National Health Program/ Coordinator, Speaker

	Chicago, IL
1992	Quality of Care Under a National Health Program: Incorporating and Critiquing the Corporate Paradigm/ Presentation 3 rd Annual Midwest Radical Scholars Conference, Loyola University, Chicago, IL
1992	Dr. Harold Levine: His Legacy and Relevance for Health Quality Today/ Presentation Chicago Internal Medicine Society, Chicago, IL
1995	History, Lessons and Tour of Cook County Hospital/ Presentation and tour leader University of Chicago Graduate Seminar on Health Care to the Poor, Chicago, IL
1995	Quality and Health Reform: 1995 and Beyond/ Presentation Department of Medicine Grand Rounds, West Suburban Hospital, Oak Park, IL
1995	Quality and Corporatized Managed Care/ Presentation Department of Medicine Grand Rounds, Rush Westlake Hospital, Oak Park, IL
1995	The Public Sector in Health Care/ Lecturer DePaul University School for New Learning, Chicago, IL Cook County Hospital History and Future/ Lecturer
1996	Decision Support for Better Prescribing: A Physicians' View/ Presentation National Association of Boards of Pharmacy/ American Association of Colleges of Pharmacy Regional District IV 1996 Annual Meeting, Chicago, IL
1996	The A.D.A. Standards as Clinical Practice Guidelines: Barriers to Implementation and solutions in publicly funded settings/ Plenary speaker
1996	Physicians' role in managed care/ Debate University of Chicago Health Policy Research Council, Chicago, IL
1996	Beyond Medline: Medical Informatics for the Practicing Academic General Internist/ Workshop Coordinator
1996	14 th Annual Midwest Society for General Internal Medicine, Chicago, IL Physicians as patients' advocates or adversaries/ Speaker
1997	National Physicians for Social Responsibility Conference, Chicago, IL
1997	There's Got to be a Better Way: Managed Care and the Current US Health System/ Presenter Department of Medicine Grand Rounds, Mount Sinai Hospital, Chicago, IL
1997	DePaul University School for New Learning, Chicago, IL, Lecturer How Students can Make Difference in Reforming Healthcare/ Presentation
1997	Midwest Regional AMSA Convention, Northwestern University, Chicago, IL Strategies and Tools for Keeping Up-to-Date in Medicine: Medical Informatics for the Practicing Internist/ Presentation
1997	Northwestern Medical School Dept of Medicine 34 th Annual The Year in Internal Medicine, Chicago, IL Computers as a Clinical Information Resource/ Workshop leader
1997	Rush-Pres St. Luke's/ Cook County Hospital Departments of Medicine/ General Medicine, Chicago, IL Clinical Skills for Primary Care/ Presenter
1997	Rush-Pres St. Luke's/ Cook County Hospital Departments of Medicine/ General Medicine, Chicago, IL

1998	Department of Medicine, Grand Rounds, Medical Informatics for the Practicing Internist/ Grand Rounds Mercy Hospital, Chicago, IL
1998	Healthcare Restructuring and its Effects on Patient Care/ Presentation DePaul University School of Law, Chicago, IL
1998	The Managed Care Debate: Special Topics in Health Policy/ Debate Northwestern University, Chicago, IL
1999	Pharmaceutical Costs: Asking the right questions prescribing the right remedies/ Keynote speaker Chicago Institute of Medicine, Chicago, IL
1999	Redefining Health Care: Minisymposium addressing current status of U.S. Health care/ Speaker Midwest American Student Medical Association, Loyola University, Chicago, IL
1999	Research on Medical Errors/ Speaker Northwestern University, Chicago, IL
2000	Opening Pandora's Box: Health Insurance, Quality and the Future of Medicine/ Grand Rounds Michael Reese Hospital, Chicago, IL
2001	Out of Control: Ethical Conflicts in our Professional Addiction to Drugs/ Grand Rounds Christ Hospital, Oak Lawn, IL
2001	Informatics and Error Prevention/ Presentation and workshop leader Chicago Patient Safety Forum Citywide Conference, Chicago, IL
2001	Medical Errors: New Findings from Institute of Medicine/ Grand Rounds Mt. Sinai Hospital, Chicago, IL
2001	Swept Away: Indigent Patients' Agendas, Outcomes, and Lives Drowning in a Sea of Drugs/ Panel Presenter University of Illinois at Chicago Medical Center, Chicago, IL
2001	Medical care and health access 2001/ Presenter Loyola University, Chicago, IL
2001	Project Leadership Group/ Lecture and tour Cook County Hospital, Chicago, IL
2001	Northwestern University Combined Public Health/ Lecture and tour Northwestern University, Chicago, IL
2001	National conference for uninsured/ Keynote speaker American Medical Students Assn, Chicago, IL
2002	Health Policy, Uninsured and Cook County Hospital/ Guest speaker Northwestern University, Chicago, IL
2002	Health Care in the City/ Lecture and tour DePaul University, Chicago, IL
2002	Illinois Hospital Association – current issues statewide conference call presentation on Involving Hospitals and the Medical Staff in Recognizing and Preventing Diagnosis Error/ Presenter Illinois Hospital Association, Chicago, IL
2002	Health Care for the Uninsured/ Guest lecturer

	University of Illinois College of Medicine, Chicago, IL
2003	Computerized Prescribing: Current Challenges/ Presentation
	Midwestern University, Grove, IL
2003	Diagnostic Error in Medicine/ Grand Rounds
	Trinity Rock Island, IL
2003	Diagnosis Errors: State of the Art/ Grand Rounds
	Condell Memorial Hospital, Libertyville, IL
2003	Patient safety-beyond blame beyond extra care/ Keynote speaker
	Illinois Organization of Nurse Leaders, Bloomington, IL
2003	Showcasing What Works/ Convener, Conference Chair, Moderator
	Chicago Patient Safety Forum, Chicago, IL
2003	Risk Consulting Study Tour/ Consultant, presenter
	Knickerbocker Hotel, Chicago IL
2004	Medication and Diagnosis Errors/ Grand Rounds
	OSF St. Francis Hospital, Bloomington, IL
2004	Medical Errors: Focusing on the Problem of Diagnosis Errors/ Grand Rounds
	St. Francis Hospital, Evanston, IL
2004	Health Policy Reform/ Seminar leader
	St. Elizabeth Hospital, Chicago, IL
2004	Medication and Diagnosis Errors/ Grand Rounds
	St. Francis Hospital, Bloomington, IL
2004	Medical Errors: Focusing on the Problem of Diagnosis Errors/ Grand Rounds
	St. Francis Hospital, Evanston, IL
2004	Health Policy Reform/ Seminar leader
	St. Elizabeth Hospital Dept of Family Practice, Seminar, Chicago, IL
2004	New Paradigms for Understanding and Preventing Diagnosis Errors/ Grand Rounds
	Provident Hospital, Chicago, IL
2004	Patient Safety: Our Personal and Collective Journey, Keynote speaker
	Plenary Chicago Patient Safety Forum Creating Safer Health Care, Chicago, IL
2004	Lesson and Insights on Electronic Clinical Documentation/ Speaker
	Chicago Area Informaticists Meeting, Chicago, IL
2004	A Physician's View of Quality Reforms Midwest Business/ Speaker
	Chicago, IL
2004	Debate on Uninsured and Future of U.S. Health Care System/ Speaker
	University of Chicago, Chicago, IL (American Medical Student Association)
2004	History and Issues Cook County Stroger Hospital/ Tour, Presentation
	DePaul University Graduate School, Department of Nursing, Chicago, IL
2005	Social Responsibility and Media Advocacy/ Plenary Presentation
	Northwestern University, Chicago, IL
2005	Health Care Policy and National Health Insurance/ Lecturer
	Loyola University Graduate School, Chicago, IL
2005	What Happened to Mr. M?/ Lecturer
	University of Chicago, Chicago, IL
2005	National Health Insurance/ Presentation

	Pritzker School of Medicine at the University of Chicago, Chicago, IL
2005	Medication Reconciliation-Lessons, Insights, Future Work/ Conference Co-Chair and Keynote Presenter
2005	Chicago Patient Safety Forum Medication Safety Conference, Chicago, IL
2005	Patient Safety and Information Technology/ Workshop Organizer and Presenter
2005	Northwestern University School of Medicine, Chicago, IL
2005	Just Saying No to Drug Reps: Pharma Free Week/ Lecturer
	Chicago College of Osteopathic Medicine AMSA Chapter, Downers Grove, IL
2005	Getting real about Patient Safety – Ten insights from the trenches/ Plenary speaker
	Loyola University Stritch School of Medicine, Maywood IL
2006	Disparities in Medicine – Lecture and Tour of Cook County (Stroger) Hospital
	University of Chicago/ Seminar Coordinator, Lecturer
	M1 Special Orientation Session, Chicago, IL
2006	Patient Safety and Health IT/ Presentation
	UIC, Chicago, IL
2006-2007	PMAD 385: Critical Analysis of Pharmaceutical Marketing/ Course co-director
	University of Illinois at Chicago College of Pharmacy, Chicago, IL
2007	Debate on the Future of American Health Care/ Keynote Speaker, Debater
	Northwestern University Feinberg School of Medicine, Chicago, IL (AMA Medical Student Section)
2007	Critical Prescribing and Evidence based prescribing issues/ Lecture
	University of Illinois, Chicago, IL
2007	Health Care in Chicago: Current crisis at Cook County Hospital and Bureau of Health Services Clinics/ Presentation
	University of Illinois, Chicago, IL
2007	U.S. Health Care Quality and its Reform/ Grand Rounds
	Weiss Hospital, Chicago, IL
2007	P4P or NHP, That is the Question – U.S. Health Care Quality and its Reform/ Grand Rounds
	Mercy Hospital, Chicago, IL
2007	Medication Reconciliation: Experiences, Challenges, and Opportunities, Patient Safety: Moving from Concept to Reality/ Workshop presenter and organizer
	Chicago Patient Safety Forum 2007 Annual Meeting, Maywood, IL
2007	Evidence Based Prescribing/ Lecturer. University of Illinois at Chicago, Chicago, IL
2008-2011	Patient Safety Course/ Lecturer
	Northeastern University College of Pharmacy, Boston, MA
2009	Medical Grand Rounds. Diagnostic Errors: Lessons from Three Hospitals. Cook County Stroger Hospital 11/12/09
2009	How To Better Prescribe In Primary Care / CME faculty
	A Core Curriculum in Adult Primary Care Medicine

	Boston University School of Medicine, Section of General Internal Medicine
2009	How to Better Prescribe in Primary Care / CME faculty A Core Curriculum in Adult Primary Care Medicine
2009	Beth Israel Deaconess Hospital – Needham, Needham, MA Narrow Diagnosis Think Tank Summit. Keynote Speaker. Harvard Risk Management Foundation. June 15, 2009
2009	Core Curriculum in Adult Primary Care lecture; How to Practice More Conservative Prescribing in Primary Care; Boston University School of Medicine section of General Internal Medicine. 9/19/2009
2010	Man with Renal Mass Overlooked for 5 months: Risk Management and Safety Reliability Implications. Presentation to Ambulatory Risk Management Leaders Council of Harvard Risk Management Foundation. Harvard Faculty Club 11/19/2010
2010-2014	PBB Medication Safety Professional Elective Spring Semester 2010 Linking Lab and Pharmacy. Massachusetts College of Pharmacy and Health Sciences School of Pharmacy, Boston
2010	What you didn't learn in Pharmacology class: 25 Principles for Conservative Prescribing. AMSA regional conference in Providence on October 29-31
2011	Health Reform and Quality: Moving Forward with Single Payer BU School of Public Health. BU medical school Boston, MA. 3/21/11
2011	Better to Best: Thoughts on Global Health Systems. American College of Medical Quality and the Brown University IHI Open School Chapter, First Annual Northeast Regional Conference on February 5, 2011
2011	Diagnosis Errors – How to Diagnose; How to Prevent / Medical Grand Rounds Winchester Hospital, Winchester, MA
2012	The View from the Front Lines: the ROI for Diagnostic Safety. Plenary speaker. CRICO Strategies Patient Safety Symposium. Cambridge.
2013	Progress and Prospective for IVR ADR Screening – CUR-IT (Canadian US IT Collaborative Group) Boston. 4/1/13
2013	MA Coalition for Prevention Medical Errors. Presentation on PROMISES Project 4/22/13.
2013	Seeing in Uncertainty: A trans professional Workshop for Care Providers and Science Educations: Arts Practica Thought on Clinical Uncertainty and VTS-Visual Thinking Strategies. 10/25/13 Brandeis University
2013	The PROMISES Project. WIHI (Institute for Healthcare Improvement) National Webinar. 11/7/13
2014	Relevance of Boundaries to Psychology Professions in Training / Invited presentation Graduate Program in Clinical Psychology, Tufts University, Medford, MA
2014	Crossing Doctor-Patient Boundaries / Ethics Grand Rounds Department of Ethics, Tufts New England Medical Center, Boston, MA
2014	Respecting Physician Patient Boundaries / Primary Care Grand Rounds Boston Medical Center, Boston, MA
2015	National Health Reform and Single Payer / Invited presentation

	Boston University Medical Students, Boston, MA
2014	Plenary Speaker. Massachusetts Patient Safety Forum. Patient Safety in Small Primary Care Practices: Health from the PROMISES Practices and Project Results. Massachusetts Coalition for the Prevention of Medical Errors. Burlington MA. 4/7/14
2014	Creating a Primary Care Morbidity and Mortality Conference: The How To's and an Example. Best Medical Practices Maximizing Skills, Minimizing Risk. BWH and BI Hospitals Harvard Medical School Course. 11/14
2014	Ask the Exerts. Panel Coordinator/Moderator: Update on Colorectal Cancer Screening; Does My Patient Have Cardiac Chest Pain? Best Medical Practices Maximizing Skills, Minimizing Risk. BWH and BI Hospitals Harvard Medical School Course. 11/14
2015	Featured speaker. Update on Diagnostic Errors. MA Coalition for Prevention Medical Errors. Burlington, MA. 2/27/15
2015	Diagnostic Pitfalls: Burning Platform and Strategies: CRICO Ambulatory Leaders Primary Care Retreat. 5/20/15
2015	Crossing Boundaries to Better Care for our Patients: Roles and Rules for Psychologists. Cambridge College. 4/6/15
2015	Findings from NSPF and FDA CPOEMS Studies. Presentation to CRICO Errors Taxonomy Task Force. 6/10/15
2016	Diagnostic Pitfalls. A new construct for understanding and preventing diagnostic errors? MA Coalition for Prevention of Medical Errors.
2016	Adding Indications to Prescriptions. MA Coalition for Prevention of Medical Errors. 12/19/16
2017	Presentation to HMS Primary Care Center PCIN Learning Session. Executive Leadership Session. 3/10/17.
2019	Single Payer and Quality / Invited Presentation Boston University School of Medicine, Boston, MA
2018	Learning from and about the #1 Cause of Medical Errors--Diagnostic Errors / Visiting Professor and Grand Rounds presenter Connecticut Children's Medical Center, Hartford, CT
2019	The Intersection of Data and Storytelling / Keynote Speaker CRICO Strategies Comparative Benchmarking System Member Summit 2019. 6/12/19
2019	Improving Diagnosis / Plenary Speaker and Panel Moderator Massachusetts Coalition for the Prevention of Medical Errors Annual Meeting, Framingham, MA
2019	Diagnosis Errors / Grand Rounds Department of Medicine, South Shore Hospital, South Weymouth, MA
2020	Diagnosis Error in the Covid-19 Era / Invited Speaker Mass Coalition for Prevention of Medical Errors
2020	Diagnosis Errors in the COVID Era / Invited Speaker Department of Medicine, Milford Regional Medical Center, Milford, MA
2022	Why and How to Screen for and Analyze Diagnostic Errors / Special PRIDE presentation/discussion moderator

	Primary Care Improvement in Diagnostic Error (PRIDE) 2/23/22.
2022	Learning from Patients with Delayed Diagnosis of Cancer: Presentation on proposed for Diagnostic Center for Excellence.
2022	Primary Care Improvement in Diagnostic Error (PRIDE) Conference 6 15/22 MPIE Risk Management Networking Program – Preventing Diagnostic Error in Primary Care 6/22/22.
2022	Medication Errors: Lessons from the RaDonda Vaught Case and Steps for Action - American College of Clinical Pharmacy ACCP Journal Webcast Episode #87 (w/ Bruce Lambert)
2023	Diagnostic Errors and Betsy Lehman BWH PRIDE Project. MA Coalition for Prevention of Medical Errors, Burlington, MA
2023	Keynote Speaker. How Can We Make Diagnosis More Reliable and Timely in 2023. Massachusetts Board of Registration in Medicine 2023 Quality & Patient Safety Conference, University of MA Worcester
2023	Avoiding Diagnostic Errors. Beth Israel Core Updates and Essentials in Primary Care 2023-2024. 12/16/2023. Presenter.
2024	Update on Diagnostic Errors. Medical Grand Rounds- BIDMC Plymouth MA 3/1/24.
2024	Learning from Patients to Prevent Diagnostic Errors -Massachusetts Healthcare Advocates Annual Symposium. Worcester MA. 4/10/2024

Regional Abstract Oral Presentations

2005	Contextual Errors in Medical Decision Making: What are they and how do we find them? / Oral presentation SGIM Midwest Regional Meeting, Chicago, IL
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National

1985	Access/Dumping Issues/ Roundtable Moderator American Public Health Association 113 th Annual Meeting, Washington, DC
1985	Introduction to Issues in Public Medicine/ Lecture Ripon College, Ripon, WI
1986	Introduction to Medical Decision-Making/ Lecture Montefiore Rikers Island Health Service, New York City, NY
1988	Malcolm Peterson Memorial Session: General Internal Medicine and Society – Bridging the Gap with a National Health Plan/ Keynote Speaker 11 th Annual Meeting Society for General Internal Medicine, Washington, DC
1989	The Chicago You Came to See: Public Health Introduction to Its People, Health and History/ Workshop organizer and Presentation 117 th Annual Meeting American Public Health Association, Chicago, IL
1990	Moving Health Services into the Community: A Dissenting View – Dangerous Either/ Or Equation/ Presentation 118 th Annual Meeting American Public Health Association, New York City, NY

1990	Urban Health Crisis: Chicago Impact/ Speaker Health Policy Advisory Committee Conference on Urban Health Crisis, New York, NY
1990	Poverty and Health/ Minicourse Coordinator Society for General Internal Medicine, 13 th Annual Meeting, Washington, DC
1990	Providing Ambulatory Care to Vulnerable Populations: What We Can Do When Clinical Care is Compromised by Constrained Resources?/ Workshop Coordinator Society for General Internal Medicine, 13 th Annual Meeting, Washington, DC
1990	Drug Formularies: Myths-In-Formation, Symposium on the Cost of Drugs, Institute for Health Policy Studies/ Presentation School of Medicine University of California, San Francisco, CA
1991	Need for a National Health Program to Ensure Quality/ Pre-course Faculty Society for General Internal Medicine (SGIM) 14 th Annual Meeting, Seattle, WA
1992	Patient Education: Beyond the Boundaries/ Keynote Address. Bethesda, MD
1992	National Health Program: A Framework for Quality Improvement/ Presentation 119 th Annual Meeting American Public Health Association, Atlanta, GA
1993	Contributed Papers on Drug Policy and Pharmacy Services/ Discussant 121 st Annual Meeting American Public Health Association, San Francisco, CA
1994	An Evening with Dr. Quentin Young: Medical Care Section/ Presentation 122 nd Annual Meeting American Public Health Association, Washington, DC
1994	Communicating Risks to Patients: Introduction and Caveats/ Keynote presentation
1995	United States Pharmacopeia Inc. Open Conference, Reston, VA
1996	Horizons in Diabetes Managements, American Diabetes Assn 39 th Annual Professional Symposium, Oak Brook, IL
1996	The Backlash Against the Backlash, Physician's for a National Health Program/ Presentation 126 th Annual Meeting American Public Health Association, New York City, NY
1997	Examining Errors in Medicine: Prevention of Sentinel Events and Untoward Outcomes/ Workshop coordinator 20 th Annual Meeting Society for General Internal Medicine, Washington, DC
1997-1998	Breakthrough Series Advisory Panel on Improving Physician Prescribing Practices Faculty, Planning Committee member Presenter. Boston, MA Boston, MA
1998	Institute for Health Care Improvement (IHI) Improving Prescribing Practices National Congress/ Faculty Minneapolis, MN
1999	Understanding and Preventing Errors in Medicine/ Grand Rounds George Washington University Department of Heath Services, Washington DC
2000	Access, Quality, and the Future of Market Medicine/ Grand Rounds St. Luke's Medical Center, Milwaukee WI

2000	Information technology for preventing health care errors/ Presentation American Informatics Association, Boston, MA
2001	Conflicts in our professional addiction to drugs....and how to Detox/ Workshop leader and presentation. Physicians for National Health Program Annual Meeting, Atlanta, GA
2001	Health care reform or deform: impacts on medical students/ Presenter American Medical Student Association, Chicago, IL
2001	Computerized Prescribing: Current Challenges or Seeking a Higher Leaping Frog/ Presentation. Academy for Health Services Research & Health Policy Annual Meeting, Atlanta, GA
2001	National health reform: theirs and ours/ Keynote Presentation. Madison WI
2001	Free Clinics of the Great Lakes Region Annual Conference: A Celebration of Commitment, Progress, and Spirit/ Keynote Presentation. Madison WI
2001	Symposium on U.S. Health Science Students as Radical Political Activists: Their work and their Impact/ Facilitator Institute of Social Medicine and Community Health, and Socialist Caucus of the American Public Health Association, Atlanta, GA
2001	Memorial Service/ Tribute for Avedis Donabedian/ Featured speaker University of Michigan School of Public Health, Ann Arbor, MI
2002	Quality improvement in healthcare / Teleconference presentation to Family Practice Dept Residents University of Kansas School of Medicine, Wichita, KS
2002	How would Dr. Donabedian think about Diagnosis Errors/ Presentation American Public Health Association 130 th Annual Meeting, Philadelphia, PA
2002	Financing National Health Insurance and Why Incrementalism Fails/ Workshop leader, presentation Physicians for National Health Program annual meeting, Philadelphia, PA
2002	Intimate Strangers: Connecting Lab and Pharmacy to Reduce Errors and Improve Care/ Plenary Speaker American Medical Informatics Association, Scottsdale, AZ
2002	Spring Congress A Drug by Any Other Name: The Role of Informatics from Drug Development through the Point-of-Care/ Plenary Speaker American Medical Informatics Association, Scottsdale, AZ
2002	Health Reform: Understanding and Addressing the Problems/ Grand Rounds University of Wisconsin, Madison, WI
2003	Stoneman Visiting Professor of Health Care Quality/ Visiting Professorship Beth Israel Deaconess Medical Center. Boston, MA
2003	Medical Malpractice/ Presentation Quality and National Health Reform, APHA 131 st Annual Meeting, San Francisco, CA
2003	Improving Quality Improvement in Health Care: Foundations and Frontiers/ Session organizer and presentation; APHA 131 st Annual Meeting, San Francisco, CA
2003	Health Progressives in APHA: What Worked, What Didn't, What Should be Done Now/ Moderator, closing speaker APHA 131 st Annual Meeting, San Francisco, CA

2003 Risk Management Tips: A Focused Look at Failure to Diagnose/ National audio conference Presenter. Risk Management Association. Lansing, MI

2003 Paper Imaging: Paradoxical Success of Cerner EMR/ Presentation Cerner Health Conference, Kansas City, MO

2003 Malpractice and Health Reform/ Presentation New York Metro Physician for a National Health Program Forum, New York City, NY

2003 Pathways for Medication Safety/ Project Consultant American Hospital Association (HRET/AHA/ISMP Project), Chicago, IL

2004 Challenges in Putting Research Results to Use: Practitioner Perspective from the Trenches/ Plenary Speaker

2004 Special Session: Capitalism and the Environment/ Convener, Moderator, Introductory Presentation

2004 American Public Health Association (APHA) 130th Annual Meeting, Philadelphia, PA

2004 Formularies, pharmacies, prescribers, and patients: understanding the economic, political, medical, and social pressures behind what we prescribe and what patients receive/ Workshop co-coordinator 27th Annual National Society for General Internal Medicine (SGIM) Meeting, Chicago, IL

2004 Universal National Health Insurance: Solution to our Malpractice, Mal-Access Mess/ Keynote speaker

2004 Broadlawns Hospital Medical Staff citywide forum, Iowa Historical Museum, Des Moines, IA

2004 Medical Grand Rounds. University of Iowa, Iowa Health System Methodist Hospital, Des Moines, IA

2004 Medical Grand rounds Broadlawns Hospital, (Polk County Public Hospital), Des Moines, IA

2004 Deep Connections: Linking Quality Improvement/ Presentation American Public Health Association 132nd Annual Meeting, Washington, DC

2004 Malpractice and National Health Reform: Fifteen Parallels / Workshop Leader Physicians for National Health Program national annual meeting & leadership training workshop, George Washington University Marvin Center, Washington, D.C.

2004 Visiting Professor, The Activism and Medicine Course Case, and MetroHealth Hospital Quality Initiatives monthly conference guest speaker discussant Case Western University, Cleveland, OH

2004 Visiting Professor, including special presentation for research seminar Diagnostic Error in Medicine Clinical Quality & Patient Safety Research Issues.

2005 Visiting Professor University of Iowa Hospitals and Clinics Division of General Internal Medicine, Iowa City, IA.

2005 Myths and Realities about Pharmaceutical Companies and Drug Prices/ Presentation. PNHP Leadership Training Institute, Philadelphia, PA

2005 Getting in Gear to Prevent Adverse Drug Events/ Presentation Agency for Healthcare Research and Quality, Washington, DC

2005	The Role of Malpractice Reform in Assuring Quality/ Presentation SGIM 28 th Annual Meeting, New Orleans, LA
2005	10 Principles for Malpractice Reform and Quality/ Presentation Leadership Training Institute. Harvard Faculty Club, Cambridge, MA
2006	Transforming Passion into Action: A New Era of Physician Advocacy/ Presenter American Medical Student Association, Chicago, IL
2006	Pharmaceutical Industry and National Health Reform: What are the Intersections?/ Leadership Training Workshop Leader
2006	Physicians for a National Health Program (PNHP), Harvard faculty club, Cambridge, MA
2006	Communicating and Acting on Critical Test Results/ Presentation AHRQ Annual Patient Safety Conference, Washington, DC
2006	Agency for Healthcare Research and Quality (AHRQ), AHIMA's Foundation of Research and Education, and the MGMA center for Research/ Invited participant, panelist. AHRQ's Conference on Healthcare Data Collection and Reporting, Chicago, IL
2006	Using Health Information Technology to Support Quality and Policy: Applications of Informatics Track/ Program Committee and Session Chair American Medical Informatics Association, Washington, DC
2007	Diagnosis Error: Epidemiology, Concepts, and Taxonomy/ Plenary speaker CRICO Harvard Risk Management Foundation, Risk Management conference on Diagnostic Error, Cambridge, MA. Missed and Delayed Diagnoses Related to Incidental Findings/ Workshop coordinator
2007	Quality of Care Through the Lens of the Single Payer National Health Insurance Model/ Workshop Organizer, Presenter National STFM 40 th Annual Spring Conference, Chicago, IL
2007	SGIM Quality of Patient Care, Patient Safety/ Program Committee SGIM 30 th Annual Meeting, Toronto, Canada
2007	Medication Reconciliation: Successes, Failures, and Why It Is So Hard/ Workshop Organizer, Presenter. SGIM 30 th Annual Meeting, Toronto, Canada
2007	Medicare D as a Teaching Opportunity: Lessons in Health Policy and Quality Prescribing/ Workshop Organizer, Presenter. SGIM 30 th Annual Meeting, Toronto, Canada
2008	Medication Reconciliation: Successes, Failures, and Why It Is So Hard Medicare D as a Teaching Opportunity: Lessons in Health Policy and Quality Prescribing. “4 th International Conference on Technology, Knowledge and Society” Northeastern University
2008	Linking lab and pharmacy Data: Warfarin Insights/ Presenter. National Steering Committee of Center for Education and Research in Therapeutics (CERT), Rockville, MD
2008	The FLIP Formulary Tool – A model for critical review of new drugs/ Presenter. Center for Education and Research in Therapeutics (CERT) investigators national scientific conference call.
2008	Reducing Diagnostic Errors with Electronic Decision Support: Clinical Documentation Perspectives / Plenary presentation

	AHRQ / AMIA Diagnosis Errors in Medicine 1 st National Conference, Phoenix, AZ
2008	What Signal? What Data? Provider Perspective: Safer Prescribing: Living with the Consequences and Opportunities of the Information Age/Plenary Speaker ISPE Mid-Year Meeting Symposium 4/28/2008. Boston, MA.
2008-2012	Pre-Course Presenter
2009	AHRQ / AMIA / SMDM Diagnostic Errors in Medicine Conferences Enhancing the quality of formulary decision making by using a checklist of critical questions. CERT Government day at Center for Medical and Medicare Services (CMS) Baltimore, MD, June 3, 2009
2009	American Medical Students Association. Washington DC Workshop Leader On Principles of Conservative Prescribing 3/14/09
2009	Conceptual issues in the development of a measure of formulary culture / Invited presentation
	ISPOR 14th Annual International Conference, Orlando, FL.
2009	Northwestern University Master's Program in Healthcare Quality and Patient Safety: Convocation Ceremony commencement speaker. Presentation Title: Executing Detours: From Scully to Obama.
2009	The CRICO/Harvard Risk Management Foundation Diagnosis Error Research Project / Co-Chair Plenary Presentation
	AHRQ-SMDM Diagnosis Errors in Medicine 2 nd National Conference, Hollywood, CA
2009	New Perspectives on Brady and Other Disclosure Obligations: What Really Works? Conference in New York November 15 and 16, 2009
2009	Rethinking Diagnosis Errors: Developing New Paradigm in Clinician Practice and Education / Richard Haber Lectureship Grand Rounds and Visiting Professorship San Francisco General Hospital, San Francisco, CA
2010	Tribute to the Life and Work of Dr. Walter J. Lear
	Joint Session LGBT Caucus of Health Professionals, Sprit of 1848, Socialist Caucus and Medical Care Section, APHA Annual Meeting, Denver, CO
2010	Improving formulary decision making.
	Chicago Effective Healthcare Conference, Chicago, IL
2010	Health Reform, Quality, and Malpractice- A view through the lens of single payor reformation
	APHA Annual Meeting, Denver, CO
2011	Visiting Professor Vanderbilt University. Dept of Emergency Medicine Emergency Medicine Grand Rounds: Health Reform, Quality and Malpractice A view through the lens of single payer reform-ulation
	Heath Services Research Quality Seminar- Guest Speaker. Concepts in Quality Improvement
	Emergency Medicine Residents Lecture Series: Diagnosis in the Emergency Room- Where it Fails
2011	Test Result Reliability Science: How Often are Results Missing and How Often are They Missing the Right Diagnosis? / Featured Speaker Society for Hospital Medicine (SHM), Dallas TX

2011	Donabedian Award: Contributions of Carolyn Clancy to Quality Improvement APHA Annual Meeting, Washington, DC
2011	Respecting and Reflecting on Diagnostic Errors / Workshop leader SGIM 34 th Annual Meeting, Phoenix, AZ
2011	Plenary speaker. System Dynamics and Dysfunctionalities: Levers for Overcoming Emergency Department Overcrowding. Consensus Conference on Interventions to Assure Quality in the Crowded Emergency Department. Society of Academic Emergency Medicine Annual Meeting Boston, Massachusetts
2011	Linking Lab and Pharmacy National Webinar sponsored by UIC CERT and Partnership for Patient Safety
2011	Diagnostic Error in Medicine: Short Course Organizer and Faculty: Diagnostic Error: A State of the Science Overview; Contributing Factors and Interventions: System Issues. Chicago
2011	Principles of Conservative Diagnosis (w/ David Eidelman). Donabedian Award Session 140 th Annual APHA Meeting Washington DC.
2011	Pharma Knows Best? Managing Medical Knowledge. Georgetown University Panelist: Medical Education: How can CME be ParmaFree June 16, 2011
2011	Critical Test Follow-up Concepts and Tactics. Webinar Presentation to National VA Communicating Test Results Workgroup 9/14/11
2011	IHI Expedition: 6 part series on Critical Values Reporting Communication / Webinar presenter Institute for Healthcare Improvement
2012	Visiting Professor Maine Medical Center. Department of Medicine Grand Round Diagnosis Error in Medicine: Can We do Better? Department of Medicine and Family Medicine Educational Conference: How to be a better prescriber: Principles of Conservative Prescribing. Medicine-Pediatrics Residents Seminar – Clinical Documentation Issues
2012	Presenter. Promises of/and Malpractice reform. IHI Quarterly National Faculty Conference Call Institute for Health Care Improvement
2012	Visiting Professor University of Michigan Ann Arbor. Dept of Urology Special Symposium and Dept of Medicine Grand Rounds Presentations. Quality 111 / Special Presentation
2012	City University of New York School of Public Health, New York, NY Diagnostic Error in Medicine: Plenary Panel Chair Speaker: Current Policy Issues in Diagnostic Error. 5 th International Diagnostic Error in Medicine Conference. Baltimore
2012	Pre-Course Introduction to Diagnostic Error in Medicine: Co-convener, speaker. System Causes of Diagnostic Error. 5 th International Diagnostic Error in Medicine Conference. Baltimore
2012	Plenary Speaker, Chair: Introduction: Lessons from the Untimely Death of Rory Staunton 5 th International Diagnostic Error in Medicine Conference. Baltimore
2013	Keynote Speaker: Role of Pharmacist in Improving Prescribing. Illinois Council of Hospital Pharmacists Annual Meeting 9/20/13

2013	Health Information Technology: Building Solutions for Patient Safety Session 401: Medication Errors in CPOE. National Patient Safety Foundation 15 th Annual Congress New Orleans 5/10/2013
2013	Presentation of Donabedian Award and Introduction to the PROMISES Project 142 nd APHA Annual Meeting, Boston, MA
2013	The Relevance of Errors and Diagnostic Errors in Medicine to Criminal Justice / Keynote speaker National Institute of Justice, Alexandria, VA
2014	Diagnostic Safety in an EHR-enabled Health Care System / webinar National Patient Safety Forum
2014	Diagnostic Error in Medicine: Informatics Challenges / Grand Rounds (w/ David Toker Neuman) Johns Hopkins Division of Health Sciences Informatics (by teleconference)
2014	Principles of Conservative Prescribing / Keynote speaker Berger Health Symposium, Circleville, OH
2014	Introduction to Diagnostic Errors in Medicine / Pre-course Workshop Presenter 7 th International Diagnosis Errors in Medicine Conference, Atlanta, GA Introduction Opening Keynote: Dr. Lucian Leape.
2014	7 th International Diagnosis Errors in Medicine Conference, Atlanta, GA Top Diagnosis Errors Articles and Events of 2014. (w/ Mark Graber). 7 th International Diagnosis Errors in Medicine Conference. Atlanta 9/17/14
2014	Crossing Boundaries to Better Care for Patients at Grady Hospital: Violation or Obligation / Grand Rounds Grady Hospital, Atlanta, GA
2014	Using Interactive Voice Response and Pharmacist for Earlier Detection and Counseling / National webinar AHRQ CERT National Science Call
2014	Stopping Errors in Ambulatory Care: Improving Patient Safety and Reduce Errors / Invited presentation Progressive Health Conference, New York City
2014	Care Outside the Hospital: Maintaining Quality and Safety / Plenary Presentation. ECRI Institute's 21 st Annual Conference, The "New" Complex Patient: The Shifting Locus of Care and Cost, National Academy of Science, Washington, DC
2014	Understanding Professional-Patient Boundaries: Protections or Barriers / Invited lecture Department of Psychiatry, Montefiore Medical Center, Bronx, NY.
2014	10 Principles for Addressing Diagnostic Error in Health Care / Keynote Speaker Joint Commission Ambulatory Conference, Oakbrook Terrace, IL
2014	Quality, Diagnosis, & Health Reform / Invited lecture APHA 142 nd Annual Meeting, New Orleans, LA

2014	Legacy of Avedis Donabedian and Presentation of 15 th Donabedian Award to Dr. Steffie Woolhandler APHA 142 nd Annual Meeting, New Orleans, LA
2014	FDA BWH CPOEMS: FDA Brigham and Women's Hospital / Invited presentation Computerized Prescriber Order Entry Medication Safety Presentation, U.S. FDA CDER/OSE/OMEPRM/DMEPA Divisions, Rockville, MD
2014	Rogers Health Policy Colloquium / Keynote speaker Weill Cornell Medical College, New York, NY
2015	What can criminal justice learn from patient safety in medicine 10 th Annual John Jay/Harry Frank Guggenheim Symposium on Crime in America, John Jay College of Criminal Justice, New York, NY
2015	Principles of Conservative Diagnosis / Plenary workshop speaker Road to RightCare Conference: Engage, Organize, Transform, San Diego, CA
2015	Better Understanding Diagnostic Errors in Medicine: Situational Awareness and Safety Nets / Keynote speaker AHRQ Patient Safety Organization National Conference, Washington, DC
2015	Indications-Based Prescribing Research Project (series of six 90-min panels) / Chair, Lead Presenter <ul style="list-style-type: none"> Panel 1: Delineating and Defining the Construct of Indications-based Prescribing Panel 2: Indications-based Prescribing and Patient Safety/Medication Errors Panel 3: Pharmacists and Indications-based Prescribing Panel 4: Patient Education/Information and Indications-based Prescribing Panel 5: Drugs of Choice Panel 6: HIT Technical and Vendor Issues AHRQ-BWH Indications-Based Prescribing Research Project https://sites.google.com/site/indicationsrx/project-overview
2015	Using Health Information Technology (HIT) as a Tool for Optimizing Medication Safety / Panelist National Patient Safety Foundation Annual Meeting, Austin, TX
2015	Keynote speaker: Putting Culture on Trial. A Class Action Suit. Ambulatory Care Expert Witness. CRICO Symposium 6/5/15 Boston.
2015	Making HIT Safer for Diagnosis / Keynote speaker Tregde Annual Patient Safety Conference, Jacobi Medical Center, Montefiore Medical Center, Bronx, NY
2015	BWH HIT CERT Projects / Invited Presentation CERT Steering Committee Meeting, Rockville, MD
2015	EHR Documentation and Health IT Safety / Webinar Health IT Safety Webinar Series, Office of the National Coordinator for Health Information Technology (ONC), U.S. Department of Health and Human Services
2015	Diagnosis Errors / Invited Lecture Department of Medicine, Indian Health Service, Gallup, NM

2015	Guest Discussant. Department of Medicine M&M. Indian Health Service Gallup, NM 7/23/15
2015	Professional-Patient Boundaries. Relevance for Caring for Native Americans. Lecture. Department of Medicine M&M. Indian Health Service Gallup, NM 7/29/15
2015	Activism: Lessons from 4 decades of advocacy work / Invited lecture Oregon Health Sciences University, Portland, OR
2015	Professionalism, advocacy, and clinician-patient boundaries / Grand Rounds Department of Medicine, Oregon Health Sciences University, Portland, OR
2015	Introduction to System Issues in Diagnostic Error / pre-course faculty International Conference on Diagnostic Error in Medicine, Washington, DC
2015	Principles of Conservative Diagnosis / Invited presentation 8th International Conference on Diagnostic Error in Medicine, Washington, DC
2015	Top 10 Articles/Advances in Diagnosis 2015 / Plenary Presentation 8th International Conference on Diagnostic Error in Medicine, Washington, DC
2015	Preventing Diagnostic Errors in Medicine and Healthcare / Keynote Speaker Fundamentally Human: An Innovative Exploration of Patient Safety. Patient Safety/Simulation Symposium Midwest Healthcare Quality Alliance, Southern Illinois School of Medicine, Springfield, IL
2015	Single Payer and Quality: 20 Year Update/Reflection on PNHP JAMA Quality Paper/Plan / Plenary Speaker Physicians for a National Health Program National Meeting, Chicago, IL
2015	Background and Presentation of Award to Rebecca Onie / Donabedian Lecture
2015	143rd APHA Annual Meeting and Exposition, Chicago, IL
2015	Cognitive Skills and Judgment; Communications and Team-Based Care / Featured speaker for 2 panels American Board of Medical Specialties (ABMS) / NSPF Summit on Certification and Diagnostic Accuracy, Washington, DC
2015	Diagnosis Errors: Institute of Medicine Report and Recommendations...and Beyond / Webinar
2016	Project Patient Care / Consumers Advancing Patient Safety (CAPS) Rational Prescribing in Elders / Online Course Faculty Georgetown GW Milken Institute School of Public Health, Washington, DC
2016	Diagnostic Errors in Medicine / Keynote speaker 15th Annual PHTS Risk Management Medical Staff Leadership Advance Conference, Charleston, SC
2016	Crossing Professional Patient Boundaries: Violation or Obligation? / Keynote speaker 15th Annual PHTS Risk Management Medical Staff Leadership Advance Conference, Charleston, SC
2016	Professional Patient Boundaries: How Can We Maintain Both Appropriate Boundaries and Caring Relationships / Medical Grand Rounds

	University of South Carolina (USC) School of Medicine / Palmetto Health, Columbia, SC
2016	Incorporating Medication Indication into CPOE: What Do We Need to Build?. iHealth Annual Meeting, American Medical Informatics Association, Minneapolis, MN
2016	Professional-Patient Boundaries / Leon Kassel Lectureship Grand Rounds Mt Sinai Hospital, Baltimore, MD
2016	Diagnostic Safety: An Emerging Frontier for Health Services Research and Quality Improvement / Invited Speaker AcademyHealth Annual Research Meeting, Boston, MA
2016	Diagnosing the Diagnostic Dilemma - the IOM Report/ Plenary Speaker American Academy of Dermatology, Washington, DC
2016	Graduate Communication Program / Commencement Speaker Northwestern University Feinberg School of Medicine, Chicago, IL
2016	Why Is Improving Diagnosis Important? Physician and Patient Perspectives / Keynote Speaker Setting the Stage: What We Know About Improving Diagnosis, AHRQ Research Summit on Improving Diagnosis in Health Care, Rockville, MD
2016	Opioid Adverse Drug Events / Webinar Speaker Federal Interagency Workgroup
2016	Diagnosis Errors: System Issues / Pre-course Faculty 9 th International Conference: From IOM to Action, Society for Improvement of Diagnosis in Medicine, Hollywood, CA
2016	The Art of Uncertainty: Unlocking its tools and diagnostic potentials in visual art / Workshop Leader 9 th International Conference: From IOM to Action, Society for Improvement of Diagnosis in Medicine, Hollywood, CA
2016	Ambulatory Morbidity and Mortality Conferences: Teaching Diagnostic Reasoning and Fostering a Culture of Safety / Workshop Leader 9 th International Conference: From IOM to Action, Society to Improve Diagnosis in Medicine, Hollywood, CA
2016	Memorial Tribute to Dr. Quentin Young (chair medicine Cook County Hospital) / Walter Lear Session 144th APHA Annual Meeting and Exposition, Denver, CO
2016	Improving Quality, Safety while Enhancing Joy and Efficiency in Practice: Making it Easier to Do the Safe Thing / Donabedian Award Session 144th APHA Annual Meeting and Exposition, Denver, CO
2016	Incorporating Medication Indication into CPOE: What Do We Need to build? 144th APHA Annual Meeting and Exposition, Denver, CO
2016	Reliable Diagnosis in Primary Care / Workshop leader IHIH 28 th Annual National Forum, Orlando, FL
2017	EMRs, Data, and Single Payer Health Systems / Workshop Co-Leader Physicians for a National Health Program Annual Meeting, Atlanta, GA
2017	Principles of Conservative Diagnosis. Workshop Leader (repeated x2)
2017	5 th Annual Lown Institute National Conference, Boston, MA
2017	State of the Art in Quality & Safety is tomorrow / Keynote speaker

	Graduate Programs in Healthcare Quality & Patient Safety 10-Year Event, Northwestern University Feinberg School of Medicine, Chicago, IL
2017	Rethinking Diagnostic Error in Wake of National Academy of Medicine Report Improving Diagnosis In Health Care / Seminar Northwestern University Feinberg School of Medicine Institute for Public Health and Medicine (IPHAM), Chicago, IL
2018	Oral Scientific Abstracts Presentations in Quality and Safety / Session Moderator SGIM Annual Meeting, Denver, CO
2018	Why Am I Taking This Drug? Incorporating Indications in CPOE / Invited presentation HIMSS Annual Meeting, Las Vegas, NV
2018	The Next Frontier to Improve Diagnosis: The New Diagnostic Team / Workshop Communicating Diagnostic Uncertainty, NPSF Annual National Meeting, Boston, MA
2018	Introduction to Diagnostic Errors / Pre-course faculty Diagnostic Error in Medicine 11 th International Conference, New Orleans, LA
2018	How to Balance Preventing Diagnostic Error with Need for Conservative Diagnosis: 10 Principles / Workshop (repeated) Diagnostic Error in Medicine 11 th International Conference, New Orleans, LA
2018	Enterprise Patient Safety Indications Prescribing Working Demonstration / Invited presentation CVS Pharmacy, Woonsocket, RI
2018	Ten Principles for more Conservative and Care-full Diagnosis / Donabedian Session Medical Care Section, 146th APHA Annual Meeting and Exposition, San Diego, CA
2019	Understanding and Preventing: Diagnostic Errors in Primary Care / Grand Rounds, Visiting Professor, consultation for quality improvement The Alfred and Gail Engelberg Department of Family Medicine and Community Health, Icahn School of Medicine at Mount Sinai, New York, NY
2019	Medication Safety Implications of Indications-Based Prescribing / Invited presentation (via webex) NCC MERP Presentation National Steering Committee, Rockville, MD
2019	Diagnostic Errors / Invited presentation 7 th Annual National Patient Safety Week, HRSA Bureau of Primary Health Care, Rockville, MD
2019	Principles of Conservative Diagnosis: How to Strategically Deploy in Primary Care / Keynote Speaker and Workshop Leader Division of General Medicine Annual Retreat, John H. Stroger, Jr. Hospital of Cook County, Chicago, IL
2019	Better Medication Prescribing: Practicing more conservatively and Incorporating indications into electronic ordering / Grand Rounds Department of Medicine, John H. Stroger, Jr. Hospital of Cook County, Chicago, IL

2019	Difficult Conversations in Health Care / Keynote Speaker Difficult Conversations in Health Care Preconference, International Communication Association 69th Annual Conference, Washington, DC
2019	Patient Provider Communication / Workshop leader Difficult Conversations in Health Care Preconference, International Communication Association 69th Annual Conference, Washington, DC
2019	The Intersection of Data Intersection of Data and Storytelling / Keynote Speaker CRICO Strategies Comparative Benchmarking System National Member Summit 2019 Meeting. 6/12/19
2019	Diagnostic Error in Primary Care: What Do We Know, What Opportunities / Keynote speaker I-PrACTISE. Improving PrimAry Care Through Industrial and Systems Engineering, Healthcare Systems Northeastern Engineering Institute and the University of Wisconsin Department of Family Medicine and Community Health, Northeastern University, Boston, MA
2019	Advancements and Challenges in Medication Safety / Invited Speaker IHI/NPSF Patient Safety & Quality Coalition Annual Meeting, Boston, MA
2019	Artificial Intelligence and Diagnosis Safety / Plenary Session Panelist Society for Improving Diagnosis in Medicine Annual Meeting, Washington, DC
2019-2020	Conservative Prescribing (4 module course) / Course Director, faculty IHI Open School, Institute for Healthcare Improvement
2020	Medication Safety / Course Lecturer (4 hours total; virtual) University of Illinois at Chicago
2020	Diagnosing Diagnosis Errors: Where Next?: Improving Diagnosis - A Personal Agenda / Invited Speaker (virtual) AHRQ CQuIPS Topic-Oriented Meeting
2020	Diagnostic Errors and Communication and Resolution Programs (CRP) / National Webinar Collaborative for Accountability & Improvement, University of Washington
2020	Research Priorities for Patient Safety Improvement in the Ambulatory Setting / Invited Expert Participant AHRQ Patient Safety Roundtable
2020	Lessons Learned in Implementing a Chronic Opioid Therapy Management System / Panelist Annual Research Meeting. AcademyHealth (virtual)
2021	Rational Prescribing and Deprescribing. Improving Prescribing Safety and Appropriateness / Invited presentation Pharmed-Out Conference, Georgetown University, Washington, DC (virtual)
2021	A Call to Action. Insights from a Decade of Malpractice Claims / Keynote Speaker national webinar olson and Med-IQ

2021	A Call to Action. Action Webinar General Medicine Insights / Keynote Speaker for national webinar Coverys and Med-IQ. 10/20/21.
2021	Medication Safety: Safer More Conservative Prescribing / Oral Presentation American Public Health Association (APHA) 2021 149 th Annual National Meeting, Denver , CO
2021	Donabedian Award Lecture: 22nd Annual Donabedian Award Lecture: My and Our Debt to Donabedian APHA 149 th Annual National Meeting. Denver
2021	Learning from Patients: Case Reviews for Diagnostic Error Prevention and Improvement / Workshop Co-Chair 14 th International Diagnostic Error in Medicine Conference (virtual)
2021	Better Together: Driving Diagnostic Improvement through Communication and Resolution Programs / Workshop Co-Chair 14 th International Diagnostic Error in Medicine Conference (virtual)
2021	Closing the loop on radiology recommendations: Developing and applying a taxonomy to track performance of recommended actions / Workshop organizer, chair, presenter 14 th International Diagnostic Error in Medicine Conference (virtual)
2021	Safely Starting, Using, and Stopping Drugs: Indications Rx, Cancel Rx and ADR Monitoring / Webinar presentation U.S. Deprescribing Research Network (USDN)
2021	Background and importance of diagnostic safety: Culture of diagnostic safety in medical offices / National webinar AHRQ Safety Culture Survey: Diagnostic Safety Supplemental Items for Medical Offices, https://www.ahrq.gov/sops/events/webinars/dxsafety.htmlwil
2021	Diagnostic Pitfalls: A New Approach to Anticipate, Prevent and Minimize Diagnostic Errors / Plenary Keynote 14 th International Diagnostic Error in Medicine Conference (virtual)
2021	Achieving Excellence in Cancer Diagnosis Panel 6: Where do we go for the future? / Panelist National Academies of Sciences, Engineering, and Medicine virtual workshop
2022	Diagnostic Pitfalls: A New Approach to Anticipate, Prevent and Minimize Diagnostic Errors/ Webinar Coverys (national webinar)
2022	Humanism in Medicine / Presenter American College of Physicians (ACP) Annual National Meeting, Chicago, IL
2022	Workshop on Advancing Diagnostic Excellence for Older Adults / Planning Committee and closing panel presenter National Academy of Medicine (NAM), Irvine CA (sponsored by Moore Foundation and John Hartford Foundation)

2022	Closed Loop Diagnostics - AHRQ R18 Patient Safety Learning Laboratories /Presenter and Panelist AHRQ Patient Safety Learning Laboratories Annual Meeting, Seattle, WA
2023	Presentation on state of the art of indications based prescribing National Council for Prescription Drug Programs, (NCPDP)workgroup on electronic prescribing, Scottsdale, AZ
2023	Conservative Diagnosis Principles: Relevance to Diagnostic Errors. Society for Improving Diagnosis in Medicine Fellows (2022-2023 cohort), Cleveland, OH
2023	Improving Cancer Diagnosis (ICDx): Learning from and Supporting Historically Marginalized Patients following delayed Cancer Diagnosis. (Presentation with T Gallagher) AHRQ DCE Update (virtual session)
2023	Introduction to Diagnostic Error in Medicine, Prenerary Workshop. 16th International Diagnostic Error in Medicine Conference, Cleveland, OH
2023	Diagnostic Centers of Excellence: Improving Cancer Diagnosis. Plenary Panel. 16 th International Diagnostic Error in Medicine Conference. Cleveland
2023	Closing the Loop for Improving Diagnosis—All Roads lead to Scheduling / Donabedian Award Session Chair and Presentation . APHA 151 st Annual Meeting, Atlanta, GA
2024	A framework for assessing the costs of delayed diagnosis. RAND Advisory Board. 1/16/2024. Invited speaker.
2024	Virtual Diagnostic Error Conference / Plenary Speaker. Iowa Healthcare Collaborative, Des Moines, IA
2024	Diagnostic Errors: #1 Safety Problem and Need for Systemic Solutions. Medical Grand Rounds, visiting professor. 2024 William N. Chambers Professor at Medicine Grand Rounds on Friday, March 29, 2024 at Dartmouth Hitchcock Medical Center. Multiple presentations on Diagnostic Errors, quality and safety
2024	Evidence of the Value of Improved Scheduling (Presentation w/ J. Benneyan) 3/14/2024. National Webinar of Patient Access Collaborative (PAC; consortium of leaders from >100 academic health systems, children's hospitals, and cancer centers across U.S.
2024	Presentation on state of the art of indications based prescribing to National Council for Prescription Drug Programs, (NCPDP) workgroup on electronic prescribing)
2024	Humanism in Medicine / Presenter. American College of Physicians (ACP) Annual National Meeting, Boston, MA
2024	Designing for Equity in Healthcare. Incorporating Patient Safety Learning Labs (PSLL) Annual Meeting. Presentation and breakout session co-chair. 9/13/24
2024	Next Steps in Diagnostic Excellence Research. Presentation at Diagnostic Excellence 2024 (DEX24). Minneapolis 10/14/24
2024	Improving Cancer Diagnosis (ICDx): Learning from and Supporting Patients Experiencing Stage 3-4 Cancer Diagnosis (w/ Tom Gallagher). Inaugural

Annual Meeting of the AHRQ Diagnostic Safety Community of Learning.
Rockville, MD 10/25/24.

2024 Donabedian Award Presentation to Mark Linzer: 3 Decades of Research and Advocacy on Patient Burnout. 24th Annual Donabedian Award Session Medical Care Section. American Public Health Assn (APHA) 10/28/24

National Abstract Oral Presentations

2005 Conceptual Issues in Critical Lab Follow-up: Linking the Work of the AHRQ Diagnosis Error and Evaluation Research Project / Oral abstract
APHA 133rd Annual Meeting, Philadelphia, PA

2016 Diagnostic Pitfalls: A New Paradigm to Understand and Prevent Diagnostic Error / Oral abstract
SGIM Annual Meeting, Hollywood, FL

International

1998 Future of Drug Information: Consumer Concerns / Invited lecture
United States Pharmacopeia, San Jose, Costa Rica

2003 Electronic linkage of lab and pharmacy data: a powerful DUR lever / Keynote Speaker
Symposium on Drug Utilization Review, XVII Helsinki University Congress of Drug Research, Helsinki, Finland

2007 3 Part Lecture Series on Quality and Patient Safety / Lecture Series
King Faisal Hospital, Kigali, Rwanda

2008 Electronically Linking Pharmacy and Data for Better Care / Workshop
13th Congress of the European Association of Hospital Pharmacists, Maastricht, Netherlands

2009 P4P: Experiences from Abroad / Roundtable
Canadian Federation of Nurses Unions (via videoconference)

2010 Introduction to Diagnosis Errors in Medicine / Opening address
3rd International Diagnosis Error in Medicine Conference, Toronto, Canada

2012 Kicking the Tires of CPOE Systems: Analysis of systems' vulnerabilities / Seminar
CUR-IT Meeting, Ottawa, Canada

2012 Indications Based Prescribing / Invited presentation
CUR-IT Meeting, Montreal, Canada

2012 Effective Management of Diagnostic Test Results Clinical Excellence
Commission of Australia 11/23/12 Keynote Regional Conference to review Clinical Focus Report: Review of Data from RCAS and/or IMS Data. Sydney Australia

2012 Diagnostic Error in Medicine: Medical Imaging Interface / Invited presentation
Australasian Imaging Society, Melbourne, Australia

2014 EMRs and Diagnostic Error in Medicine / Invited presentation
ISQua 31st International Conference. Rio de Janeiro, Brazil

2016	Research Results on Indication Based CPOE Alerts to Prevent Look Alike and Sound Alike Drug Name Mix-ups / Panelist 5th World Congress of Clinical Safety, International Association of Risk Management in Medicine (IARMM), Boston, MA
2017	Diagnostic Errors in Primary Care: Improving Diagnosis in Healthcare and Beyond / Invited lecture 17 th Annual Multispecialty Conference: Medical Negligence and Risk Management, Center for Human Genetics, Los Cabos, Mexico
2017	Crossing Profession Patient Boundaries in Healthcare: Risks and Benefits / Invited lecture 17 th Annual Multispecialty Conference: Medical Negligence and Risk Management, Center for Human Genetics, Los Cabos, Mexico
2017	The Electronic Medical Record: Vulnerabilities, Liabilities, Opportunities / Invited lecture 17 th Annual Multispecialty Conference: Medical Negligence and Risk Management, Center for Human Genetics, Los Cabos, Mexico
2017	Principles of Conservative Diagnosis (repeated twice) / Workshop Leader Preventing Overdiagnosis: Towards Responsible Global Solutions, Quebec City, Canada
2017	Learning from and Preventing Diagnostic Errors in Medicine / Invited lecture Usher Institute for Population Health Science and Informatics, Edinburgh, UK
2017	Diagnosis Error: Moving forward from the US National Academy of Medicine Report on Improving Diagnosis in Medicine / Seminar Newcastle University Medical Sciences Graduate School, Newcastle, UK
2019	Under-diagnosis vs. over-diagnosis: Trade-off or 2 sides of same coin? / Keynote speaker 2 nd Australasian Diagnostic Error in Medicine Conference, Melbourne, Australia
2020	Presentation of 2020 Mark Gruber Diagnosis Award to Dr. Carmel Crock Australia- Plenary Speaker (virtual) Society to Improve Diagnosis in Medicine Annual International Meeting
2022, 2023	Diagnosis Safety / Invited Presentation 3rd Saudi Arabia Patient Safety Conference. SPSC 2022.

International Abstract Oral Presentations

2017	Balancing Diagnostic Errors With Conservative Diagnosis: Developing A New Paradigm For More Appropriate Diagnosis / Oral abstract ISQuA 34 th Annual International Conference, London, UK
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Report of Clinical Activities and Innovations

Current Licensure and Certification

1976	Licensed Physician and Surgeon, State of Illinois
1980	Certification, American Board of Internal Medicine
2002-2007	Registered Pharmacy Technician, State of Illinois
2007	Massachusetts Medical License

Practice Activities

1981-2007	Ambulatory Care Inpatient Medicine Inpatient and Outpatient Medical Consult Service	Attending (1981-86) and Senior Attending Physician (1987-2007) Cook County Hospital Chicago	3-9 one-month Inpatient Rotations /yr 2-3 outpatient primary care clinics/yr
2008-2013	Inpatient Attending	General Medicine Service, BWH	2-4 weeks/yr
2008-	Ambulatory Care	Phyllis Jen Center, BWH	1 session/week

Report of Technological and Other Scientific Innovations

1986-1993	Computer Program for General Medicine Physician Scheduling (written in Dbase 2 and Dbase 3 code. Used for scheduling 225 CCH GMC physicians and nurse practitioners' appointments for 250,000+ patient appointments 1986 1993). Also, Emergency Dept/Ambulatory Screening Clinic direct referral appointment scheduling program Dbase3+ for rotating medicine residents.
1988-1997	GMC Physician Practice Group Reports, b) Appointment Slips and Patient Label Masters generator, c) Others (multiple relational database report programs written in R & R Report Writer. Used in CCH General Medicine and Pediatrics Comprehensive Care Clinics 1988-1997. Written in R&R Report Writer coded language
2000-2007	Cook County Hospital Pager System: Download/Mapping Program for Palm 3 (handheld computer). (widely used in CCH system 2000-2007, permitting downloading to palm and Windows-based handheld computers of 2500+ pager and office phone #'s for quick look-up on wards and clinics)
2001	Structured Voice Recognition Program for General Medicine Clinic attending notes and quality tracking (using Dragon 5.0 Professional speech recognition engineer w/ Microsoft Access 97)
2001	Thyroxine Lab-Pharmacy linkage program (linking SMS laboratory and NDC pharmacy data for tracking patients with missed diagnosis of hypothyroidism) 10/01. Prototype of lab-pharmacy linked data using unique identifier and chronologic serial display of lab data merged with pharmacy records. Used for study published in Arch Intern Med 2005.
2001-2003	General Medicine Clinic patient demographic profiles for Palm Pilot. Access 97 program for downloading from HBO scheduling system, mapping and uploading patient demographic to Palm 3.0 address book.

	Widely used by physicians and others to access patient lists and patient demographics. (written w/ A. Rothenberg)
2003	Access Progress for Linking Lab and Pharmacy Data- Presented and distributed at Symposium on Drug Utilization Review (DUR). XVII Helsinki University Congress of Drug Research Helsinki, Finland (written w/ A. Rothenberg)
2003-2006	Medical Consult Services-Rounds List. Designed in Quickbase.com. Used for Cook County Stroger Hospital Med Consult Service 2003-2006
2006	Idea Processor-Word Processing Outlining Innovative program using MS Access and MS Word.
2017-2019	Indications Based Prescribing: PI for project that designed, programmed, tested of innovative prototype CPOE (ordering medications).
2022-2024	Automated interacting texting app for Screening for Adverse Drug Reactions (w/ Health Vector) for Pharmacist to reach of to patients newly started on medications in 3 General Medicine practices.

Report of Education of Patients and Service to the Community

No presentations or publications below were sponsored by outside entities.

Activities

1975-	Blood Donor: American Red Cross/ Life Source Blood Donor/Brigham and Woman's Hospital. Donate every ~8-12 wks
1975-1989	Committee to Save Cook County Hospital/ Founding member, newsletter editor, treasurer
1985-2008	Chicago Bicycle Coalition/ Member, Community outreach and fundraising Chair
1985	Invited Testimony: Emergency Room Access Issues/ Health Committee, Chicago City Council, Chicago IL
1985	Americans at Risk: The Case of the Medically Uninsured, U.S. Senate Special Committee Hearings June 27, Washington, DC/Expert Witness
1986	The SCAPHA Advocacy Experience, Central Massachusetts Area Health Education Center National Conference on Caring for the Poor, Conway, NH.
1987	League of Women Voters/ Debate Panelist. Debating the Future of Cook County Hospital
1989	Effects of University of Illinois and Michael Reese Merger, Schiff GD, Goldsmith J, Young QD, Billings Hospital / Debate on Future of Health Care in Chicago
1990	Chicago Health Summit Hearings on Future of Health System of Cook County/ Invited Testimony
1990	Future of Cook County Hospital and Effects and Maternal and Child Health/ Debate Panelist. Debate on Chicago Health Summit recommendations at Illinois Maternal and Chicago Health Coalition meeting

1991	Community Renewal Society of Chicago/ Panelist. Features of Australian Health System
1991	Chicago Metropolitan Planning Council/ Panelist. Future of Cook County Hospital
1992	Canada's Health Care System: A Model for the U.S.?/ Presenter
1992	Debate with American Medical Association.
1992	Debate on Alternatives for National Health Reform, Skokie Illinois
1994	American Council on Consumer Interests: 40th Annual Conference
	Colston Warne Lectureship: Consumer Interest and Health Reform
1995	Illinois Nurses Association/State of Illinois Public Hearings/ Invited testimony
	The Quality and Safety of Patient Care
1995	The Future of Health Reform and Quality, 5 th Annual Midwest Radical Scholars & Activists Conference, Chicago, IL/Presenter
1995-1999	Chicago Public Schools' High School Science Fair/ Judge
1996	Delaware Consumer Health Care Consortium/ Speaker
1996	Illinois Nurses Association Forum at Democratic National Convention Chicago/ Founding/ supporting member, Presenter, Nurses Network for a National Health Program
1997	Oakbrook Republican Club/ Presenter The history, role and future of Cook County Hospital/ Lecturer
1997	Lecture to Schweitzer Urban Health Medical Student Urban Health Service Internship
1999	Lecturer. Our Nation's Health Care The Forum Club
1999	Implications of universal health care/ Keynote speaker
	Forum for New Priorities Series #6. Presented by Institute for Policy Studies, and Committee for New Priorities of Chicago Jobs with Justice
1999-2001	Chicago Public Schools High School Debate/ Judge
1999-2005	Schweitzer Fellows Program/ Faculty
2000	Schackowsky, Jan H.R. 4455 Email Address Forwarding (Portability) Act/Author & Initiator
	Bill to require providers of electronic mailboxes to provide forwarding addresses. 106 th Congress 2 nd Session. Bill did not pass into law.
2000	Universal Health Care in the Year 2000, Illinois Campaign for Better Health Care, South Suburban Grey Panthers/ Keynote speaker
2000	The 2000 Presidential Election and Health Care Reform: Symposium Budetti P, Fegan C, Schiff G. UIC Medical Center. Sponsored by Chicago Area Schweitzer Fellows
2001	The Ethics of Managed Health Care Ethical Humanist Society of Greater Chicago/ Keynote Presenter
2001	Speaker, Managed care and your care College of Dupage Older Adult Institute public policy series/ Speaker
2001-	Chicago Patient Safety Forum (CPSF)/Co-Founder. Steering Committee Member (2002-2007). Elected representative to Scientific Council (2004-2007).

2002	How ESL Teachers Ended up Uninsured...and What Can be Done about it?/ Speaker
2002	2nd Annual Wisconsin Activist's Conference Activism Not Reactivism/ Keynote speaker and workshop leader Wisconsin Physicians for Social Responsibility. Madison WI
2004	Cover the Uninsured Week/ Keynote speaker Policy Forum University of Illinois Chicago School of Public Health
2004	Delegation of Vietnam Women's Union Peace Tour including Bach Mai Hospital/ Participant, organizer
2005	Patient Safety and Information Technology-Five Key Issues for Today and the Future/ Speaker Chicago Patient Safety Summit. Metropolitan Chicago Healthcare Council (MCHC).
2005	Illinois Healthcare Referendum 2006 Speaker Training Workshop/ Keynote Speaker
2005	Alternatives for National Health Reform/ Temple KAM Isaiah Israel, Chicago Keynote speaker
2005	Debating and Answering the Hard Questions: Physicians for a National Health Program Annual Nation Meeting/ Panelist
2005	Debating Concierge Medicine--Concierge Medicine New Horizons in Health Care Event/ Debater Union League Club. Business Development Institute and Castle Connolly Medical Conference. Chicago IL
2014	Addressing the opioid epidemic by prescribing drugs more rationally Berger Health Community Forum 4/22/14. Circleville, OH
2011	Editorial Reviewer. Section on Drug Therapy Our Bodies Ourselves Women's Health Book 2011 40th Anniversary Edition
2014-2015	Mentor for Job Shadow Day (community high school students mentor)
2015-	Bikes Not Bombs. Fundraising Support

Educational Materials for Patients and the Lay Community

Books, Monographs, Articles and Presentations in Media

1. Concerned Rush Students*. M.D.'s in the Drug Industry's Pocket. Science for the People. 1976; 8(6):6-9, 20. (*member of authorship group)
2. **Schiff GD.** Why we need to rebuild cook county hospital, Chicago Tribune (op ed article) 1987 pp. unknown.
3. **Schiff GD.** Prevention and managed care. New York Times (letter) 3/19/97.
4. **Schiff GD,** Blatt M. Sprit of Debate (letter) Tufts Magazine 2000; 8 (1):2-3
5. Cohen M, **Schiff GD.** Ban on Generic Drugs Will Proved to be Fatal Mistake. (op-ed commentary) Chicago Sun Times. 5/5/2004; pp. 63

Recognition

1990	The Casualties of Cost	Radio interview, Minnesota Public Radio, Saint Paul, MN
1997	Is America's Health Worse Under Managed Care?	National televised debate, National Public Television/HBO Studio Debate

1997	Good or Bad Deal for Patients?	Local televised debate, AMA-Sunbeam
2002	Tour of Cook County Hospital (shown on historic evening of closing of old Cook County hospital building)	Television appearance, WTTW, Chicago, IL
2007	Health Care in Cook County	Television interview, Chicago Tonight, WTTW, Chicago IL
2019	Medicare for All	Radio interview, Bradley Jay Radio Program WBZ, Boston, MA https://www.iheart.com/podcast/1002-jay-talking-28654274/episode/medicare-for-all-45589615/

Report of Scholarship

Peer reviewed publications in print or other media

Research investigations

1. **Schiff GD.** Using a computerized discharge summary database check box for adverse drug reaction monitoring. *QRB Qual Rev Bull.* 1990; 16:149-155.
2. Rucker D, **Schiff GD.** Drug formularies: myths-in-information. *Med Care.* 1990; 28:928-942.
 - Reprinted in *Hospital Pharmacy* 1991; 26:507-514.
3. **Schiff GD**, Hedge HM, LaCloche L, Hryhorczuk DL. Inpatient theophylline toxicity: preventable factors. *Ann Intern Med.* 1991; 114:748-753. Author reply to letters: *Ann Intern Med.* 1991; 115:407-8.
 - Abstracted as a key article of year in *Yearbook of Medicine* 1992 ;102-106
 - Reprinted as book chapter in Harris AP, Zitzmann WG (eds). *Operating Room Management: Structure, Strategies, & Economics.* Baltimore, MD. Mosby- 1998 (pages not available)}
4. Ansell DA, **Schiff GD**, Dick S, Cwiak C, Wright K. Voting with their feet: public hospitals, health reform and patient choices. *Am J Pub Health* 1997; 88 (3):439-441.
5. **Schiff GD**, Aggarwal HC, Kumar S, McNutt R. Prescribing potassium despite hyperkalemia: medication errors uncovered by linking laboratory and pharmacy information systems. *Am J Med.* 2000; 109:494-497.
6. **Schiff GD**, Wisniewski M, Bult J, Parada JP, Aggarwal H, Schwartz DN. Improving inpatient antibiotic prescribing: insights from participation in a national collaborative. *Jt Comm J Quality Improv.* 2001; 27(8);387-402.
 - Lead article in theme issue: Overcoming Antimicrobial Resistance
7. **Schiff GD**, Keehr L, Sai TT, Bult J. High Rates of Adverse Effects and Patient Unawareness of Withdrawn Lipid Lowering Drug Combination in a Public Hospital Clinic. *Pharmacoepidemiol Drug Saf.* 2002;11(8):643-645.
8. **Schiff GD**, Klass D, Peterson J, Shah G, Bates DW. Linking laboratory and pharmacy: opportunities for reducing errors and improving care. *Arch Intern Med.* 2003;163: 893-900.

9. Schiff GD, Fung S, Speroff T, McNutt RA. Decompensated heart failure: symptoms, patterns of onset, and contributing factors. *Am J Med.* 2003; 114:625-630.
10. Goldberg D, Schiff GD, McNutt R, Furumoto-Dawson A, Hoffman A, Hammerman M. Mailings timed to patients' appointments: a controlled trial of fecal occult blood test cards. *Am J Prev Med.* 2004; 26(5):431-435.
11. Cram P, Rosenthal GE, Ohsfeldt R, Wallace R, Schlechte J, Schiff GD. Failure to recognize and act on abnormal test results: the case of screening bone densitometry. *Jt Comm J Qual Patient Saf.* 2005; 31:90-97.
12. Schiff GD, Kim S, Krosnjar N, Wisniewski MF, Bult J, Fogelfeld L, McNutt RA. Missed Hypothyroidism Diagnosis Uncovered by Linking Laboratory and Pharmacy Data. *Arch Intern Med.* 2005; 165: 574-577.
13. Parada JP, Schwartz DN, Schiff GD, Weiss KB. Effects of type and level of training on variation in physician knowledge in the use and acquisition of blood cultures: a cross sectional survey. *BMC Infect Dis.* 2005; 5:71-79.
14. Schiff GD, Kim S, Seger AS, Bult J, Bates DW. Ability of practitioners to identify solid oral dosage tablets Cook County-Harvard Solid Oral Dosage Identification Study. *Am J Health Syst Pharm.* 2006; 63 (9): 838-843. Reply to letters: Schiff G D, Kim S, et al. Issues in medication safety. *Am J Health Syst Pharm.* 2007; 64(1): 24.
15. Weiner SJ, Schwartz A, Yudkowsky R, Schiff GD, Weaver FM, Goldberg J, Weiss KB. Evaluating physician performance at individualizing care: a pilot study tracking contextual errors in medical decision making. *Med Decis Making.* 2007;27(6):726-34.
16. Schiff GD, Hasan O, Kim S, Abrams R, Costby K, Lambert BL, Elstein AS, Kabongo ML, Krosjnar N, Odwazny R, Wisniewski MF, McNutt RA. Diagnostic Error in Medicine: Analysis of 583 Physician-reported Errors. *Arch Intern Med.* 2009;169(20):1881-1887.
17. Raja AS, Wright C, Sodickson AD, Zane RD, Schiff GD, Hanson R, Baeyens PF, Khorasani R. Negative appendectomy rate in the era of CT: an 18-year retrospective. *Radiology.* 2010;256(2):460-5.
18. Crabtree BF, Chase SM, Wise CG, Schiff GD, Schmidt LA, Goyzueta JR, Malouin RA, Payne SM, Quinn MT, Nutting PA, Miller WL, Jaén CR. Evaluation of patient centered medical home practice transformation initiatives. *Med Care.* 2011 Jan;49(1):10-6.
19. Haas JS, Iyer A, Orav EJ, Schiff GD, Bates DW. Participation in an ambulatory e-pharmacovigilance system. *Pharmacoepidemiol Drug Saf.* 2010;19(9):961-9.
20. Yu S, Galanter W L, Lambert B L, Borkowsky S, DiDomenico R, Schiff GD. Selection of drug-laboratory result pairs for an inpatient asynchronous alert program: results of a Delphi survey. *Am J Health-Syst Pharm.* 2011; 68:407-14
21. Yang Y, McBride MV, Rodvold KA, Tverdek F, Trese AM, Hennenfent J, Schiff GD, Lambert BL, Schumock GT. Hospital policies and practices on prevention and treatment of infections caused by methicillin-resistant *Staphylococcus aureus*. *A J Health-Syst Pharm.* 2010; 67(12):1017-24.
22. Weingart SN, Seger AC, Feola N, Heffernan J, Schiff G, Isaac T. Electronic Drug Interaction Alerts in Ambulatory Care: The Value and Acceptance of High-Value Alerts in US Medical Practices as Assessed by an Expert Clinical Panel. *Drug Saf.* 2011;34(7):587-93.

23. Goldberg D, Benson JL, **Schiff G**, Pandey T. Contributions of public hospitals to regional health care: a population-based analysis of the county health care system serving metropolitan Chicago. *J Health Care Poor Underserved*. 2011;22(1):346-58.
24. Steinman MA, Handler SM, Gurwitz JH, **Schiff GD**, Covinsky KE. Beyond the prescription: medication monitoring and adverse drug events in older adults. *J Am Geriatr Soc*. 2011; 59(8) 1513-20.
25. Leung AA, Keohane C, Amato M, Simon SR, Coffey M, Kaufman N, Cadet B, **Schiff GD**, Zimlichman E, Seger DL, Yoon C, Song P, Bates DW. Impact of Vendor Computerized Physician Order Entry in Community Hospitals. *J Gen Intern Med*. 2012;27(7):801-7.
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27. Haas JS, Amato M, Marinacci L, Orav EJ, **Schiff GD**, Bates DW. Do Package Inserts Reflect Symptoms Experienced in Practice?: Assessment Using an Automated Phone Pharmacovigilance System with Varenicline and Zolpidem in a Primary Care Setting. *Drug Saf*. 2012;35(8): 623-628.
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29. Bitton A, Schwartz GR, Stewart EE, Henderson DE, Keohane CA, Bates DW, **Schiff GD**. Off the hamster wheel? Qualitative evaluation of a payment-linked patient-centered medical home (PCMH) pilot. *Milbank Q*. 2012;90(3):484-515.
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31. Pollard SE, Neri PM, Wilcox AR, Volk LA, Williams DH, **Schiff GD**, Ramelson HZ, Bates DW. How physicians document outpatient visit notes in an electronic health record. *Int J Med Inform*. 2013;82(1):39-46.
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1. Six Part Webinar on Appropriate Prescribing. Produced by the Cook County UIC Attorney General's Neurontin Settlement Grant FLIP Project 2008
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Abstracts, Poster Presentations, and Exhibits Presented at Professional Meetings

1. Norwich DE, Galanter WL, Jarrett JB, Mirica M, Seger DL, Fiskio J, Eguale T, Salazar A, Cashy JP, Hale JA, Linder JA, Lambert B, Falck S, Volk LD, Schiff GD. Did the PCP prescribe that drug? Conceptual and methodological challenges in defining new prescriptions initiated by PCP's. Poster Presentation 5/8/19. SGIM 41st Annual National Meeting. Washington DC.
2. Reyes NH, Ruan R, Wright A, Lim A, Singh H, Agarwal S, Schiff GD. Diagnostic Pitfalls: Operationalizing a New Paradigm to Understand and Prevent Diagnostic Errors. Poster Presentation. 5/9/19. SGIM 41st Annual National Meeting. Washington DC.
3. Winch S, Seoane L, Blackwell N, Schiff G. Medical Wellbeing?" Flat lining not flourishing. Can the virtues help the crisis in medical wellbeing? Coauthor (S. Winch 1st

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4. Chua IS, Ehrlich O, Ransohoff JR, Petrides AK, Khazen M, Melanson SEF, **Schiff GD**. Help me with that urine toxicology result: insights and challenges to providing laboratory-assisted interpretations for patients receiving chronic opioid therapy SGIM 2020 National Annual Meeting. Accepted Poster Presentation
5. Bennett S, Mirica M, Wright A, Volk L, Salazar A, Shah S, Khazem M, Eguale T, **Schiff GD**. Designing and Deploying a Pharmacist-Mediated Adverse Drug Reaction Surveillance System using a Patient Portal SGIM 2020 Accepted Oral Presentation by co-author.
6. Ramos JM, Mirica MM, **Schiff GD**. Are clinicians adhering to the 2018 USPHTF PSA shared decision-making guidelines? Chart review of PSA discussion documentation. SGIM 2020 National Meeting Birmingham. (poster accepted; meeting canceled due to COVID)
7. **Schiff GD**, Olson M, Linzer, Sullivan E, Mirica M, Khazem M, Ramos J. The Quest for a High-Quality Diagnosis: Measuring and Comparing Acute Clinical Encounters and Clinical Documentation. 14th International Diagnostic Error in Medicine Conference, 2021.
8. Bontempo AC, and **Schiff GD**. Diagnosing Diagnostic Error of Endometriosis: A Qualitative Analysis of Patient Experiences from a Mixed Methods Survey. Diagnostic Excellence 2024 (DEX2024). Minneapolis, MN. 10/13/24.
9. **Schiff, GD**; Marica, M; Brigham, KB; Hussey HM; Gallagher, TH; Stone VE Inequities in Diagnosis of Late-Stage Breast, Colorectal, Lung, and Prostate Cancers. Diagnostic Excellence 2024 (DEX2024). Poster Presentation. Minneapolis, MN. 10/13/24

Narrative Report

I have been working in quality improvement, patient safety, and health IT, as a practitioner, teacher, researcher, institutional leader, and patient and policy advocate for more than four decades. My main areas of interest and contribution have been in the area of diagnosis and medication errors/safety, health information technology, primary care quality improvement, and patient advocacy.

Working at Chicago's Cook County Hospital and Rush Medical College/University I led the Hospital's Quality Assurance/Improvement, and Pharmacy and Therapeutics (Formulary) Committees, was Medical Director of the General Medicine Clinic, and was full Professor of Medicine at Rush. I was recruited by Dr. David Bates to be the Associate Director of the BWH Center for Patient Safety Research and Practice in 2007. I have continued in that role and have also served (since 2016) as Quality and Safety Director of the Harvard Medical School Center for Primary Care, and for the past four years Course Director for the HMS Master of Healthcare Quality and Safety Special Topics Course, while leading a series of externally funded projects over the past 13 years.

My recent projects and contributions include being PI leading:

-AHRQ-funded malpractice and safety statewide randomized controlled trial —the PROMISES Study; demonstrated the impact of a primary care improvement collaborative and coaching on reducing safety risks.

-Multi-institutional project funded by the FDA examining electronic prescribing safety risks (CPOEMS; produced an FDA White Paper, new taxonomy, and multiple articles illuminating CPOE-related errors and ways to prevent).

-Succession of 4 innovative diagnosis error safety projects funded by CRICO (most recently Diagnostic Pitfalls -collating and analyzing hundreds of diagnostic pitfalls from specialty focus groups and malpractice claims; MD-SOS developing and testing new diagnostic process metrics and their correlation with PCP burnout, stress and encounter times).

-AHRQ- Indications Rx Project where we designed an innovative electronic prescribing prototype which outperformed Epic and Cerner in terms of safety, speed and clinician satisfaction.

-AHRQ – CoPI on a 2022-2026 R18 Grant to create a Diagnostic Center for Excellence (BWH lead center, in collaboration with Tom Gallagher, University of Washington), which will bring together the two field of diagnostic improvement with communication and resolution programs. The project will enroll 240 patients with advanced cancers to both learn about potential opportunities for improvement in their diagnostic journeys, as well as support patients in obtaining transparent answers to their concerns about potential delays.

-Two current major medication safety projects funded by the Moore Foundation:

- 1) Conservative Prescribing, a \$2 million project for creating and testing new metrics for clinician prescribing practices, consortium of VA, Northwestern, UIC, and Brigham for which I am the overall PI. This project also developed an IHI Open School course to teach rational prescribing principles (>3,000 students completed course in just 1st 4 months).
- 2) Adverse Drug Reaction Surveillance -using automated electronic outreach to patients to patients newly started on medications, building on our successful AHRQ-CEDAR (Calling for Early Detection of Adverse Reactions, which used IVR phone outreach) using patient portals and texting to screen patients for adverse reactions.

We are currently in the second round of funding and projects for the Moore Foundation funded PRIDE (Primary-care Research in Diagnosis Errors (PRIDE) Learning Network PRIDE project for which I am the PI. This project is a collaborative with the State of Massachusetts Dept of Public Health Betsy Lehman Center for Patient Safety which centers on collecting, learning from and sharing diagnostic error cases and issues. We have published 9 AHRQ Web M&M Case in depth case discussions from the PRIDE Project at <https://psnet.ahrq.gov/psnet-collection> We are developing the PRIDE Toolkit to facilitate statewide dissemination and spread of this work. <https://psnet.ahrq.gov/psnet-collection> This past year I have been part of speaking and planning for 2 National Academy of Medicine Conferences on Diagnostic Excellent (one related to cancer, upcoming one on diagnosis in elderly patients).

Through these projects and others, we have helped transform understanding and classification of diagnostic errors (through the development of the widely used DEER Taxonomy for classifying where in the diagnostic process errors occur), identified multiple design and workflow vulnerabilities and areas for prescribing safety improvement (by collating safety reports from multiple institutions, performing a series of vulnerability tests, directly querying clinicians in real time about erroneous prescriptions), developed multiple practical tools and interventions to detect, increase situational awareness, and provide clinical decision support to prevent medication and diagnostic errors (including publication of a series of recommendations), and educated tens of thousands of clinicians and safety researchers (through national webinars, grand rounds, and conference presentations).

From 2010-2014, I chaired the CRICO (Harvard Risk Management Foundation) Ambulatory Risk Management (ARM) Leaders Group. In that role I helped lead the development of the Building Risk Management/Patient Safety Bridges to Outpatient Networks Program, which provided \$5 million in funding to support creation of the first-ever ambulatory risk/safety programs (hiring Ambulatory Risk Manager and building safety infrastructure) in 10 Harvard academic institutions. Since 2010, I have been co-Director the BWH Ambulatory M&M Conference and in that capacity prepared and presented multiple highly interactive didactic sessions which I continue to co-lead.

Previously I supervised residents in the ambulatory clinics and general medical inpatient services (for 25 years at Cook County and 1st five years working at BWH). More recently my HMS teaching activities have been through a series of course teaching roles and mentoring. I served as a lead faculty for the HMS Center for Primary Care Academic Improvement Collaborative (AIC-CARES) as well as faculty and Core Steering Committee member for the AHRQ Engineering High Reliability Learning Lab (faculty for multiple Learning Sessions for these 2 projects based in the HMS Center for Primary Care, Harvard School of Public Health, and the Northeastern Healthcare Systems Engineering Institute). In each of these projects we brought together participants from multiple Harvard institutions for one-to-two day learning sessions to present didactic sessions as well as lead small group workshops and discussions related to quality improvement activities and engineering reliability and design concepts.

Since 2012, I have been the Assistant Director of the HMS-CRICO Best Medical Practice Maximizing Skills, Minimizing Risk course as well as lecturer at each of the (mostly) annual course sessions. I serve as faculty (Capstone reviewer/mentor; lecturer) for the HMS Global Safety Quality, Informatics and Leadership (SQIL) program, and am now the Course Director for the HMS Master's Program in Quality and Safety Special Topics course. As special topics course director I prepared and presented 8 two-hour sessions as well as oversaw an additional 5 sessions.

I have been a member of the editorial board of *Medical Care* since 1997 and have served as its Chair since 2011. I have also served on the editorial board of the *Joint Commission Journal on Quality and Safety* and am currently a member of the Editorial board of *BMJ Quality & Safety*—two leading quality and safety journals. I am also a long-time member of the editorial board for the *Journal of Public Health Policy*. I have served as the guest-editor for special issues for three of these four journals (all but BMJ QS). I am the author of a new chapter, Chapter 9 in the 21st

Edition of *Harrison's Principles of Internal Medicine* entitled "Diagnosis: Reducing Errors and Improving Quality."

Awards/honors include: Institute of Medicine Chicago Leader of the Year, Institute for Safe Medical Practice (ISMP) Lifetime Achievement Award, Modern Healthcare Top 30 Leaders of the Future, and BWH President's Recognition Award for Extraordinary Service to Patients (2017) and Partners in Excellence Award (2018), and the Mark Graber Diagnostic Quality Award from the Society to Improve Diagnosis in Medicine (2019), and the John M. Eisenberg Patient Safety and Quality 2019 lifetime achievement award (with a lengthy interview published in the July 2020 *Joint Commission Journal of Quality and Safety*). In 2020 my "Piece of My Mind" article on professional patient boundaries was featured by *JAMA* as one of the top personal essays in the past 40 years. In 2021, I was awarded the Avedis Donabedian Quality Award from the American Public Health Association Medical Care Section. In 2024 the editorial that Bruce Lambert and I wrote in 2022 on the Radonda Vaught medication error has been awarded the 2024 Editor's Choice Award the Journal of the American College of Clinical Pharmacy (JACCP) for the top article in the past 2 years.

EXHIBIT 2

The Wayback Machine - <https://web.archive.org/web/20241113202106/https://psnet.ahrq.gov/web...ties-suicide-risk-assessment-emergency-and-primary-care-settings#8>

Multiple Missed Opportunities for Suicide Risk Assessment in Emergency and Primary Care Settings

Jane L. Erb, MD, Sejal B. Shah, MD and Gordon D. Schiff, MD |

January 7, 2022

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The Case

An 18-year-old man with a reported history of untreated depression and suicide attempts at age 13 (with cutting behaviors and over-ingestion of medication), but no history of psychiatric hospitalizations, was seen in the Emergency Department (ED) with a chief complaint of suicidal ideation. He reported feeling more depressed lately. He had been open with his older brother about suicidal thoughts for some time, but 2 days prior to presentation, he became intoxicated and reported having purchased a gun, but did not disclose details. After the brother disclosed this information to their mother, emergency medical services (EMS) brought the patient to a local ED. He initially reported taking 10 ibuprofen tablets, although he later denied this quantity.

The patient was not on any psychiatric medications and did not have an outpatient therapist or psychiatrist. He denied auditory and visual hallucinations, had no somatic complaints, denied illicit substance use but did endorse alcohol use and occasional cannabis use. He had stable vital signs, was calm and cooperative, and displayed a stable affect. Due to suicidal ideation, he was placed on safety hold and a psychiatric consultation was requested. Laboratory studies were only remarkable for a positive cannabis result on urine toxicology screen. The Psychiatry team's recommendation was for

discharge with outpatient therapy. The patient's mother agreed with this plan. He was discharged with outpatient resources, the crisis hotline phone number, and strict return precautions.

One month later, the patient had his first visit with his new primary care physician (PCP). He was again sent to an ED after he described a suicidal gesture consisting of superficial cutting of his wrist with a kitchen knife several days earlier, which he stated was in reaction to a recent romantic disappointment. In the ED, he was placed on emergency hold civil commitment for "persons posing risk of serious harm by reason of mental illness." However, he stated that the thoughts of hurting himself had passed quickly, and he had no plan to hurt or kill himself or anyone else. He denied any safety concerns at home--he reported living alone but was looking forward to moving in with his brother in 1 week and noted strong family support in the area. He cited future-orientation including enjoying working in a hotel. The Psychiatry team recommended that the patient was safe for discharge with outpatient follow-up, which was arranged. They also recommended that patient start an antidepressant medication, but the patient declined, stating he does not like to take medications.

Ten days later, the patient had a follow-up phone visit with his PCP. He mentioned that two days prior, he had been up all-night sending texts to a girl and felt "manic," or restless with racing thoughts. He reported recurrent thoughts of harming himself but no plan and no self-injurious behavior. He thought that he would be able to manage these feelings himself as he did not want to kill himself and did not want to go to the ED again. The only medication he expressed interest in taking was "a stimulant for his ADHD," which he self-diagnosed due to his impulsivity. The patient's PCP felt he would likely benefit from inpatient psychiatric care but documented that he denied suicidal ideation or an active plan. Nonetheless, the PCP was quite concerned and scheduled a therapy appointment for the

next day, with a plan for the therapist to call the patient later in the day.

Later that day, the patient was found with a loaded gun in a hotel room. He said he was about to shoot himself in the head. He called his mother, who called the police, who quickly came and took him to the ED for the third time. There he was evaluated and involuntarily admitted to an inpatient psychiatric hospital for five weeks. He was ultimately discharged with a diagnosis of “Bipolar 1 – moderate-severe with mixed features.” Suicide risk at discharge was assessed as being “chronic risk which was mildly elevated,” although he did well with no known instances of suicidality or suicide attempts in the next six months of follow-up.

The Commentary

By Jane L. Erb, MD, Sejal B. Shah, MD and Gordon D. Schiff, MD

Few considerations are more critical than identifying a person at risk for taking their own life. The frequency of suicide is distressingly high—every year 800,000 people globally, of whom nearly 50,000 reside in the U.S., die by suicide. In 2019 in the U.S., 12.0 million adults had serious thoughts of suicide of whom 3.5 million made suicide plans and 1.4 million attempted suicide with suicide rates rising every year over the past two decades.¹ While this past year has been an exception, in that suicide rates slightly decreased in 2020 for reasons that are not well understood, we know that COVID-19 has also increased many stresses and risk factors such as social isolation, unemployment, substance use, and depression, and there is worry that any downward trends in suicide rates may not continue.²

While a large published series of all types of diagnostic errors in medicine found that “failure to consider” a particular diagnosis was the leading contributor to misdiagnosis, *failure to consider*

suicide risk was not the problem in the current case.³ The patient had recently been seen twice in the ED, and he had several contacts with his primary care clinician, all of whom worried about and weighed this risk. We can debate whether the ultimate diagnosis of bipolar disorder might have been made earlier, the diagnosis that he was at risk for suicide was strongly considered, although in hindsight one could argue this risk was not considered seriously enough. This “near miss” illustrates many of the issues and challenges that primary care and mental health provider face in assessing and helping such patients.

In clinical medicine, patients are generally forthcoming with their medical history, symptoms, concerns, and plans. However, some patients who are seriously contemplating suicide hide their thoughts or intentions out of shame or because they do not want to be detected and stopped. A recent meta-analysis examining the sensitivity of inquiring about suicidal thoughts showed that the overall pooled sensitivity was 41%, and in non-psychiatric settings (e.g., general medical practices), the sensitivity was only 22%.⁴ Another meta-analysis of more sophisticated prediction models concluded that while they did identify some patients at risk and helped classify overall population-level risks, they had low positive predictive values with high false positive and false negative rates if implemented in isolation (“their accuracy in predicting a future event is near zero”).^{5,6} These sobering findings have important implications for our ability to use simple screening questions (such as question #9 in the PHQ-9, which asks patients whether they had “thoughts that you would be better off dead, or thoughts of hurting yourself in some way”). Numerous studies have shown that the PHQ-9 is neither sensitive nor specific enough to predict imminent suicide. An analysis of > 200,000 PHQ-9s showed that a positive screen on question #9 was associated with an increased risk over days to months but was *not good* at predicting acute risk for an individual patient.^{6,7}

Approaches to Improving Safety

Nonetheless, a variety of understandings and tools can help us better assess patients. First is having knowledge of which populations are at higher risk of suicide and factors that increase or reduce risk. High risk groups include male sex, being young, veterans, Indigenous tribes, lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ).⁸ Factors such as serious mental illness, prior suicide attempts and self-harming behavior, alcohol or substance use, serious recent illness or diagnosis, physical pain, a history of trauma or recent loss, and severe anxiety or insomnia, to name a few, are associated with increased risk of suicide. Risk factors can be divided into non-modifiable risk factors (sex, family history) and modifiable risk factors, which include protective factors such as having a stable and meaningful job and family/friend support. The Joint Commission now recommends that all patients with behavioral health risk factors receive screening further assessment and screening with one of the validated tools they have identified.⁹

The second is having a continuing care connection and carefully following the patient. In one study, about 45% of patients who died by suicide visited a primary care physician in the preceding 30 days.¹⁰ In many cases, there are identifiable opportunities to help the patient overcome issues such as social isolation, refer for additional help, provide resources (particularly telehealth access), and prevent or minimize access to lethal means such as firearms and pills. And, as in many other chronic diseases, a long term, trusting, personal relationship with a primary care provider can help in improving access, assessments, and accuracy of decision making.

Finally, standardized screening tools should be routinely available, utilized, and their results documented and acted upon in the patient's medical record. Although there insufficient evidence to recommend any one tool,¹¹ several mentioned by the Joint Commission and the national Zero Suicide initiative,⁹

one widely used tool they recommend and which we favor is the Columbia Suicide Severity Rating Scale (C-SSRS) Screener.¹²⁻¹⁴ It is among the best evidence-based tools to help screen for and triage risk for suicidal behavior.¹⁵ It has a demonstrated ability to identify those at higher imminent risk for suicide and thus direct resources to those at highest risk. It consists of 2 versions—one for initial screening and a second for follow-up. It has both better specificity (99%) than the final question of the PHQ-9 (fewer false positive responses) as well as higher (93%) sensitivity.¹⁴ After two questions about wishing one were dead and/or having actual thoughts of killing oneself, any positive findings open a branch of three additional questions to delve further into whether one is thinking about methods of suicide and having any intent or preparatory behavior. Everyone, regardless of their answers about suicidal thoughts, is then asked about any history of attempting suicide, including just starting to attempt or preparing for an attempt, and how long ago that was. Using the C-SSRS does not require mental health training, as it was designed for use by clinicians as well as non-clinicians such as police, clergy, school counselors, crisis hotlines, and paramedics. It is publicly available in over 100 languages.¹³

Importantly, the C-SSRS does not solely rely on patients' volunteering of suicide ideation but collects information about actual behaviors. This means that the questioner can seek out and include information from multiple sources (e.g., in our case, the patient's brother, or in other cases a patient's spouse or even the presence of a suicide note). At-risk behaviors are assessed in relation to their connection with *intention* to use them to attempt suicide rather in than a disconnected way (e.g., superficially cutting his wrist but no intention of killing himself). This markedly improves the accuracy, especially the specificity, of the screening.

One of the reasons it is important to improve not only the

sensitivity of a screening tool, but also its specificity, is to prevent false positive conclusions and suboptimal resulting actions. Family members, PCPs, or mental health staff might feel it safer to send individuals to an ED anytime there is the slightest concern of suicide. Viewed through the lens of hindsight bias, any time a patient attempts to take one's life, everyone involved may wish they had taken such an action. The problem is that repeatedly sending a patient to the ED has its own side effects and often is not the optimal way to help a patient in serious mental distress. Here, we are not simply referring to prioritizing limited ED and psychiatry resources (although we always should be mindful of these considerations), but rather what is best for the patient. If patients who do not have a high acute risk for suicide are reflexively sent to the ED, they risk spending many hours waiting to be "cleared" and receiving little more than a one-time psychiatric safety risk assessment. Unfortunately, up to 70percent of patients who leave the ED after an evaluation for suicidal ideation or behavior never attend their first follow-up appointment.¹⁶ Most importantly, when patients learn that expressing any thoughts of suicide results in being sent to the ED, they may be less likely to honestly share their thoughts or to seek mental health help in the future.

The best answer to this dilemma lies in more far-reaching upstream prevention efforts. First, it is crucial to recognize that just over half of individuals who attempt suicide do not have an established mental health history listed in their health record. About 54% of individuals who died by suicide in 27 states in 2015 had not received a clinical diagnosis of a mental illness at time of death (and attributed to relationship, substance use, health, financial, job crises).^{17,18} In fact, Parkland Health and Hospital System in Dallas elected to begin screening all inpatients, outpatients, and emergency room patients using the Columbia screening tool.¹⁹ At the very least, one should consider screening any patient presenting in any setting in

distress or who otherwise has significant risk factors, such as recent perceived loss, new diagnosis of serious health issue, financial or job crises, or being treated for a major psychiatric disorder. If the screening shows someone is at an elevated risk, then a more detailed analysis of other factors that contribute to risk as well as protective factors should be routine. In addition to potentially identifying individuals at risk, consider the destigmatizing benefits of inquiring about mental health as a routine matter and making it clear that it is an important component of one's general health. Not over or under-reacting to suicidal thoughts or behaviors will also promote patients being more open with their clinicians.

Once the assessment is done, then safety planning is another key component, which consists of a brief intervention, jointly developed by a clinician and patient, that plan for coping and support.²⁰ It includes an agreed upon plan for ways to manage thoughts of suicide between provider visits, steps to reduce access to lethal means, and supports that the patient can access.²¹ Additionally, any interventions that can reduce modifiable risk factors should be implemented. This approach should replace the use of “no-harm contracts,” a practice that many consider to be ineffective, disrespectful, and at times even harmful in that these “contracts” can drive a wedge between caregivers and patients.²¹⁻²³ Much better is to jointly develop a plan that respectfully builds upon patients’ innate resiliency and problem-solving capabilities, including a series of “what-if” scenarios of what to do if suicidal feelings start to intensify.

Providing optimal suicide prevention requires leadership support and a competent workforce. Unfortunately, most health professionals enter the workforce unprepared to work with suicide-related ideation and behavior.^{24,25} It will also likely require additional resources, something even committed leaders will be challenged to dedicate in this pandemic era where

resources are even more stretched and stressed.^{26,27}

While in the past, treatment for suicidal patients has mostly focused on the underlying mental health disorder, evidence now supports directly targeting suicidal thoughts and behaviors with approaches such as cognitive behavioral therapy and dialectical behavior therapy, and collaborative assessment.²¹

It is worth highlighting the important fact that firearms are the leading cause of death by suicide, and thus it is important to inquire whether an individual has access to a firearm.²⁸ While not every gunshot wound results in death, this method is not only the most likely to kill, but the time involved is so short that there is little opportunity for the attempt to be aborted by the individual or interrupted by another person.^{28,29} Gun and ammunition storage practices may be relevant for preventing unintentional injuries, but a gun safe is not safe if an individual with a suicide plan knows the combination. According to a recent review discussing the most promising approaches for decreasing self-harm, efforts to decrease the case-fatality rate from suicide attempts by restricting access to firearms remain a high priority, especially in the United States.^{29,30} However, as the authors stated, such approaches have been slow to be implemented in the US, given the high prevalence of gun ownership and the political influence of the opponents of firearm safety policies.³¹

Death by suicide is a public health crisis. Healthcare providers often feel ill-equipped to identify and manage patients who are at high psychiatric safety risk. With the use of evidence-based tools, engagement with patients and an understanding that health care providers can be a “lifeline,” the interventions described above may begin to turn the tide in this crisis.

Take Home Points

- As do many other clinicians and families, the primary care

team, ED doctors, psychiatry consultants, and family struggled with the challenges of trying to help this young man who was in various ways reporting thoughts and behaviors suggesting risk of self-harm and possibly suicide.

- Screening for suicide risk, while a critical step in potentially preventing death or injury by suicide, is fraught with additional challenges centering around the poor sensitivity and specificity of many of the screening tools. The widely used PHQ-9 question about suicide has poor sensitivity and specificity. A much better screening tool we recommend is the Columbia-Suicide Severity Rating Scale Screener which can be administered by both clinicians and non-clinician individuals who have been trained in its use.
- So called “no harm contracts” are best avoided and, instead, replaced with approaches that emphasize joint planning that more respectfully builds upon patients’ innate resiliency to self-soothe, build upon one’s protective factors and reduce those risk factors that are modifiable, and problem-solve ways to create a series of “what-if” scenarios of what to do if suicidal feelings start to intensify
- Firearms are the leading means of fatal suicides in the U.S. Effort to ensure patients at risk for suicide do not have access is critical
- There is a bidirectional and undoubtedly complicated relationship between substance use and suicide. The longer-term mental health and suicide impacts of the COVID-19 pandemic are difficult to predict, but there are many reasons for concern.

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The long-standing process for submitting PSNet WebM&M case submissions is anonymous. Users may contribute by submitting a case at the following

link: <https://psnet.ahrq.gov/webmm/submit-case>

Periodically, the Primary-Care Research in Diagnosis Errors (PRIDE) Learning Network, a collaborative project convened by the Brigham and Women's Hospital Center for Patient Safety Research and Practice, and the State of Massachusetts Betsy Lehman Center for Patient Safety, contributes cases and commentaries from their monthly discussions of diagnosis error cases to PSNet. PRIDE is funded by a grant from the Gordon and Betty Moore Foundation. This case was produced in cooperation with the PRIDE Learning Network. We acknowledge the assistance of the PRIDE project director Maria Mirica, PhD, in preparing this case discussion.

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EXHIBIT 3

Discussants : Jane Erb, Sejal B. Shah and Gordon D. Schiff

Few diagnoses are more critical, and difficult to accurately make, than correctly diagnosing a person about to, or at risk for taking their own life. The frequency of suicide is truly daunting—every year 800,000 people globally of whom nearly 50,000 reside in the U.S. die by suicide. In 2019 in the U.S., 12.0 million adults had serious thoughts of suicide of whom 3.5 million made suicide plans and 1.4 million attempted suicide with suicide rates rising every year over the past 2 decades. (REF)

While a large published series of all types of diagnostic errors in medicine found “failure to consider” a particular diagnosis to be the leading contributor to misdiagnosis, in our patient this type error was not the problem. He had recently been seen twice in the emergency department, as well as had several contacts with his primary care clinicians (including earlier the same day he went to a hotel room with a loaded gun and a plan to kill himself) all of whom worried about and weighed this diagnosis. Thus, while the suicide risk was strongly considered, in hindsight one could argue this risk was not considered seriously enough. This “near miss” illustrates many of the issues and challenges primary care and mental health practitioners face in assessing and helping such patients.

In clinical medicine, patients are generally forthcoming with their medical history, symptoms, concerns, and plans. However, this is not always the case in patients who are seriously contemplating suicide, who not infrequently hide their thoughts or intentions out of shame or because they don’t want to be detected and stopped. A recent meta-analysis examining the sensitivity of inquiring about suicide showed that the overall pooled sensitivity was 41%, and in non-psychiatric settings (e.g. general medical practices such as our patient), the sensitivity was only 22%. Another metanalysis of more sophisticated prediction models concluded that while they did help classify overall population level risks, they had low positive predictive value and with high false positive and considerable false negative rates if implemented in isolation (“their accuracy in predicting a future event is near zero”). This data is sobering and humbling and has important implications for our ability to use simple screening questions (such as question #9 in the PHQ-9 which asks patients whether they had “Thoughts that you would be better off dead, or thoughts of hurting yourself in some way”). Numerous studies have shown that the PHQ-9 is neither sensitive nor specific enough to predict imminent suicide including an analysis of > 200,000 PHQ-9’s that showed that a positive screen on questions #9 was associated with an increased risk over days to months, but was not good at predicting acute risk for an individual patient.

Nonetheless a variety of understandings and tools can help us better assess patients. First is having knowledge of which populations are at higher risk of suicide. High risk groups include male sex, veterans, Indigenous tribes, Lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ) as well as more obvious populations such as those with serious mental illness, prior suicide attempts, ideation/attempts, alcohol or substance use, serious recent illness or emotional distress trauma or loss, history of recent trauma or loss.). Risk factors for assessing a particular patient can be divided into static non modifiable risk factors (sex, family history), modifiable risk factors which include protective factors such as having a stable job and family support.

The second is “knowing” and more carefully following the patient. Data shows that 45% the patients who die by suicide visited a primary care physician in the preceding 30 days.(REF) In many cases there are identifiable opportunities to better help the patient overcome issues such as social isolation, refer

Commented [GS1]: Schiff, Gordon D., Omar Hasan, Seijeoung Kim, Richard Abrams, Karen Cosby, Bruce L. Lambert, Arthur S. Elstein et al. "Diagnostic error in medicine: analysis of 583 physician-reported errors." *Archives of internal medicine* 169, no. 20 (2009): 1881-1887.

Commented [GS2]: Association between suicidal ideation and suicide: meta-analyses of odds ratios, sensitivity, specificity and positive predictive value

BJPsych Open Highlight Articles
Published online by Cambridge University Press: 31 January 2019
Catherine M. McHugh Amy Corderoy Christopher James Ryan

Commented [GS3]: Prediction Models for Suicide Attempts and Deaths A Systematic Review and Simulation
Bradley E. Belsher, PhD^{1,2}; Derek J. Smolenski, PhD, MPH¹; Larry D. Pruitt, PhD¹; et alNigel E. Bush, PhD¹; Erin H. Beech, MA¹; Don E. Workman, PhD^{1,2}; Rebecca L. Morgan, PhD, MPH³; Daniel P. Evatt, PhD^{1,2}; Jennifer Tucker, PhD¹; Nancy A. Skopp, PhD¹
Author Affiliations
JAMA Psychiatry. 2019;76(6):642-651

Commented [GS4]: 1. Na PJ, Yaramala SR, Kim JA, et al. The PHQ-9 item 9 based screening for suicide risk: a validation study of the Patient Health Questionnaire (PHQ)-9 Item 9 with the Columbia Suicide Severity Rating Scale (C-SSRS). *J Affective Disorders*, 2018, 232:34-40
2. Simon GE, Rutter CM, Peterson D, et al. Does response on the PHQ-9 depression questionnaire predict subsequent suicide attempt or suicide death? *Psychiatr Serv*, 2013 Dec 1;64(12):1195-1202

Commented [GS5]: Mann, J. John, Alan Aptek, Jose Bertolote, Annette Beautrais, Dianne Currier, Ann Haas, Ulrich Hegerl et al. "Suicide prevention strategies: a systematic review." *Jama* 294, no. 16 (2005): 2064-2074

EXHIBIT 4

general medical practices), the sensitivity was only 22%.⁴ Another meta-analysis of more sophisticated prediction models concluded that while they did help classify overall population-level risks, they had low positive predictive values with high false positive and false negative rates if implemented in isolation ("their accuracy in predicting a future event is near zero").^{5,6} These sobering findings have important implications for our ability to use simple screening questions (such as question #9 in the PHQ-9, which asks patients whether they had "thoughts that you would be better off dead, or thoughts of hurting yourself in some way"). Numerous studies have shown that the PHQ-9 is neither sensitive nor specific enough to predict imminent suicide. An analysis of > 200,000 PHQ-9s showed that a positive screen on question #9 was associated with an increased risk over days to months but was *not good* at predicting acute risk for an individual patient.^{6,7}

Approaches to Improving Safety

Nonetheless, a variety of understandings and tools can help us better assess patients. First is having knowledge of which populations are at higher risk of suicide and factors that increase or reduce risk. High risk groups include male sex, being young, veterans, Indigenous tribes, lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ).⁸ Factors such as serious mental illness, prior suicide attempts and self-harming behavior, alcohol or substance use, serious recent illness or diagnosis, physical pain, a history of trauma or recent loss, and severe anxiety or insomnia, to name a few, are associated with increased risk of suicide. Risk factors can be divided into non-modifiable risk factors (sex, family history) and modifiable risk factors, which include protective factors such as having a stable and meaningful job and family/friend support.

The second is having a continuing care connection and carefully following the patient. In one study, about 45% of patients who died by suicide visited a primary care physician in the preceding 30 days.⁹ In many cases, there are identifiable opportunities to help the patient overcome issues such as social isolation, refer for additional help, provide resources (particularly telehealth access), and prevent or minimize access to lethal means such as firearms and pills. And, as in many other chronic diseases, a long term, trusting, personal relationship with a primary care provider can help in improving access, assessments, and accuracy of decision making.

Finally, standardized screening tools should be routinely available, utilized, and their results documented and acted upon in the patient's medical record. We favor the Columbia Suicide Severity Rating Scale (C-SSRS) Screener,¹⁰⁻¹² which is among the best evidence-based tools to help screen for and triage risk for suicidal behavior. It has a demonstrated ability to identify those at higher imminent risk for suicide and thus direct resources to those at highest risk. It consists of 2 versions-one for initial screening and a second for follow-up. It has both better specificity (99%) than the final question of the PHQ-9 (fewer false positive responses) as well as higher (93%) sensitivity.¹² After two questions about wishing one were dead and/or having actual thoughts of killing oneself, any positive findings open a branch of three additional questions to delve further into whether one is thinking about methods of suicide and having any intent or preparatory behavior. Everyone, regardless of their answers about suicidal thoughts, is then asked about any history of attempting suicide, including just starting to attempt or preparing for an attempt, and how long ago that was. Using the C-SSRS does not require mental health training, as it was designed for use by clinicians as well as non-clinicians such as police, clergy, school counselors, crisis hotlines, and paramedics. It is publicly available in over 100 languages.¹¹

Commented [RS7]: Is there a recommendation that these higher risk individuals be automatically screened?

Commented [SSB8R7]: There is a Joint Commission recommendation to screen all patients who present to the hospital setting with a behavioral health complaint. This is in hopes of capturing as many patients as possible with a screening tool.

Commented [GS9R7]: Goal of identifying patients will automatically capture the patients at higher risk. If coming in with a behavioral health... Not just recommendation but mandate. Our hope is new standard of care get screen w/ CC RS

Commented [RS10]: I think it would be helpful to discuss additional screening tools in more detail. Although your recommendation that C-SSRs may be the best screening tool, it would be helpful to describe a few other tools (with sensitivity and specificity) and other components important in a screening tool. In an older manuscript, Giddens JM et al. Innov Clin Neurosci 2014;11:66-80 challenged that type I and II errors may not be controlled in C-SSRs. Has this been settled?

Commented [SSB11R10]: I'm definitely not the expert in this—Jane may be better suited to answer this.

Commented [GS12R10]: Fineise appease we are aware there are multiple validated tools our health system believes in the validity of this easy to train and administer efficient no official endorsement all colleagues in ED using this across country

Commented [GS13R10]: Disclaimer not endorsing but fineise

EXHIBIT 5

showed that the overall pooled sensitivity was 41%, and in non-psychiatric settings (e.g., general medical practices), the sensitivity was only 22%.⁴ Another meta-analysis of more sophisticated prediction models concluded that while they did identify some patients at risk and helped classify overall population-level risks, they had low positive predictive values with high false positive and false negative rates if implemented in isolation ("their accuracy in predicting a future event is near zero").^{5,6} These sobering findings have important implications for our ability to use simple screening questions (such as question #9 in the PHQ-9, which asks patients whether they had "thoughts that you would be better off dead, or thoughts of hurting yourself in some way"). Numerous studies have shown that the PHQ-9 is neither sensitive nor specific enough to predict imminent suicide. An analysis of > 200,000 PHQ-9s showed that a positive screen on question #9 was associated with an increased risk over days to months but was not good at predicting acute risk for an individual patient.^{6,7}

Approaches to Improving Safety

Nonetheless, a variety of understandings and tools can help us better assess patients. First is having knowledge of which populations are at higher risk of suicide and factors that increase or reduce risk. High risk groups include male sex, being young, veterans, Indigenous tribes, lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ).⁸ Factors such as serious mental illness, prior suicide attempts and self-harming behavior, alcohol or substance use, serious recent illness or diagnosis, physical pain, a history of trauma or recent loss, and severe anxiety or insomnia, to name a few, are associated with increased risk of suicide. Risk factors can be divided into non-modifiable risk factors (sex, family history) and modifiable risk factors, which include protective factors such as having a stable and meaningful job and family/friend support. The Joint Commission now recommends that all patients with behavioral health risk factors receive screening further assessment and screening with one of the validated tools they have identified.

The second is having a continuing care connection and carefully following the patient. In one study, about 45% of patients who died by suicide visited a primary care physician in the preceding 30 days.⁹ In many cases, there are identifiable opportunities to help the patient overcome issues such as social isolation, refer for additional help, provide resources (particularly telehealth access), and prevent or minimize access to lethal means such as firearms and pills. And, as in many other chronic diseases, a long term, trusting, personal relationship with a primary care provider can help in improving access, assessments, and accuracy of decision making.

Finally, standardized screening tools should be routinely available, utilized, and their results documented and acted upon in the patient's medical record. Although there insufficient evidence to recommend any one tool, several mentioned by the Joint Commission and the national Zero Suicide initiative, one widely used tool they recommend and which we favor is the Columbia Suicide Severity Rating Scale (C-SSRS) Screener¹⁰⁻¹². It is among the best evidence-based tools to help screen for and triage risk for suicidal behavior. It has a demonstrated ability to identify those at higher imminent risk for suicide and thus direct resources to those at highest risk. It consists of 2 versions-one for initial screening and a second for follow-up. It has both better specificity (99%) than the final question of the PHQ-9 (fewer false positive responses) as well as higher (93%) sensitivity.¹² After two questions about wishing one were dead and/or having actual thoughts of killing oneself, any positive findings open a branch of three additional questions to delve further into whether one is thinking about methods of suicide and having any intent or preparatory behavior. Everyone, regardless of their answers about suicidal thoughts, is then asked about any history of attempting suicide, including just starting to attempt or preparing

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Commented [RS(6): Is there a recommendation that these higher risk individuals be automatically screened?

Commented [SSB7R6]: There is a Joint Commission recommendation to screen all patients who present to the hospital setting with a behavioral health complaint. This is in hopes of capturing as many patients as possible with a screening tool.

Commented [GS8R6]: We have revised to address your comment and incorporate above information from our psychiatry expert co-author

Commented [GS9]: Reference to add

National Patient Safety Goal on Suicide Prevention in Healthcare Settings. R3 NPSG Suicide Prevention Resources

<https://www.jointcommission.org/resources/patient-safety-topics/suicide-prevention/>

Commented [GS10]: <https://www.tandfonline.com/doi/full/10.1080/13811118.2021.1938321>

Commented [GS11]: <https://www.jointcommission.org/resources/patient-safety-topics/suicide-prevention/>

<https://zerosuicide.edc.org/toolkit/identify/screening-options>

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Commented [GS12]: <https://www.sciencedirect.com/science/article/pii/S003318219301872>

Commented [RS(13): I think it would be helpful to discuss additional screening tools in more detail. Although your recommendation that C-SSRs may be the best screening tool, it would be helpful to describe a few other tools (with sensitivity and specificity) and other components important in a screening tool. In an older manuscript, Giddens JM et al. Innov Clin Neurosci 2014;11:66-80 challenged that type I and II errors may not be controlled in C-SSRs. Has this been settled?

Commented [SSB14R13]: We are definitely not the national experts on this

Commented [GS15R13]: We are aware there are multiple tools and don't want to partisan in exclusively endorsing one to neglect of other others. We are not aware of any "official" endorsement or preference for the Columbia tool (the Jt Commission does cite it prominently and most of our psychiatrists' colleagues use mainly this one across ... [1]

Commented [GS16R13]: Disclaimer not endorsing but fine

EXHIBIT 6

From: Patrick S Romano [REDACTED]
Sent: Saturday, February 1, 2025 1:28:20 AM
To: Schiff, Gordon D.,MD [REDACTED] ; [REDACTED] >
Subject: RE: removal of your publication for AHRQ Web M&M

External Email - Use Caution

Memo attached. Per this memo, AHRQ staff were given until 5 pm ET Friday to “Take down all outward facing media (websites, social media accounts, etc.) that inculcate or promote gender ideology.”

Based on guidance provided to AHRQ staff, this instruction from OPM was interpreted to include anything with the words “transgender,” “nonbinary,” or “gender identity.” The phrase “LGBTQ” is problematic because it includes that letter T for “transgender.”

AHRQ staff identified the relevant items (using ordinary search tools) and communicated directly with their web site contractor to pull them down.

We (the content producers and editors) were informed after the materials had already been pulled down.

The total impact was to remove 2 Perspectives, 3 WebM&Ms (Cases, Commentaries, Spotlights), and ABOUT 15 shorter materials (e.g., brief summaries of published papers from journals indexed in PubMed).

Best wishes...

Patrick S. Romano, MD MPH FAAP FACP
Professor of Medicine and Pediatrics, UC Davis Division of General Medicine
Co-Editor in Chief, AHRQ *Patient Safety Network* (PSNet and WebM&M)
[REDACTED]

[REDACTED]
Sacramento, CA 95817

Telephone: [REDACTED]

E-mail: [REDACTED]

Website: <https://health.ucdavis.edu/team/pediatrics/122/patrick-romano---internal-medicine---pediatrics-general-sacramento>

From: [REDACTED]

Sent: Friday, January 31, 2025 11:18 PM

To: Schiff, Gordon D.,MD

Cc: [REDACTED]

Subject: Re: removal of your publication for AHRQ Web M&M

External Email - Use Caution

Gordy,

This is unbelievable, though not surprising.

I can certainly try to pitch an article to my editors about this. A couple of questions for you:

1. Is this the offending line: "High risk groups include male sex, being young, veterans,

YES THAT IS THE ENTIRE "OFFENSIVE" LANGUAGE. NO ADVOCY OF ANYTHING OR ANYONE, THO HONORED TO HAVE THIS STAND WITH THOSE AUTHORS AND ARTICLES WHO DO.

2. Can you forward me the policy document (it didn't come through in the forwarded email.)

YES WILL GET TO YOU IN NEXT EMAIL

AS I BELIEVE YOU WILL SEE, IT IS NOT EVEN CLEAR THAT OUR ARTICLE VIOLATES THESE BROAD DROCONIAN TRUMP SWEEPING GUIDELINES.

3. Patrick, can you share with me how exactly this transpired? Who contacted you? What was the process? How did they find this case study?

Thanks,

[REDACTED]
Bellevue Hospital
NYU School of Medicine
Editor-in-Chief, *Bellevue Literary Review*

On Jan 31, 2025, at 10:22 PM, Schiff, Gordon D.,MD [REDACTED] wrote:

This is a true outrage and we all (those on this email chain and many others) need to actively oppose the removal of published peer reviewed articles such as ours here. (see below with link)

In this AHRQ Web-M&M case discussion, we simply quoted the scientific literature for evidence-based risk factors for suicide (as part of a much larger patient safety discussion of a suicide M&M case).

This is a dangerous attack on science, academic freedom, medical and public education, and patient safety. I doubt the Trump administrator who removed this even read this. I pray they have no family members or friends impacted by suicide, though it would be highly unlikely that this would be the case.

I am cc'ing this email to leaders here at Harvard and professional organizations of which I am a member to ask your help in having this peer-reviewed publication “book burning” attack overturned, and the article returned to the publication site. Of course, I recognize this only one tiny example of a widespread assault of science, as well as one human rights and justice that is occurring at many levels, but I believe every article censored is a serious blow to patients’ safety and professional medical practice.

Gordon D. Schiff MD
Associate Director Center for Patient Safety Research and Practice
Brigham and Women's Hospital. General Medicine Division
Quality and Safety Director Harvard Medical School Center for Primary Care

Associate Professor of Medicine Harvard Medical School

Research Office

[REDACTED]
Boston, MA 02120

Clinical Practice Office: Phyllis Jen Center for Primary Care

From: Patrick S Romano

Sent: Friday, January 31, 2025 8:28:02 PM

To: Schiff, Gordon D.,MD [REDACTED]; [REDACTED]

Cc:

Subject: FW: removal of publication

External Email - Use Caution

I regret to inform you that your wonderful Case and Commentary from 2022 on “Multiple Missed Opportunities for Suicide Risk Assessment,” has been removed from the PSNet website due to a perception that it violates the White House policy on websites “that inculcate or promote gender ideology” (attached).

It is still visible through the Wayback machine,

<https://web.archive.org/web/20241113202106/https://psnet.ahrq.gov/web-mm/multiple-missed-opportunities-suicide-risk-assessment-emergency-and-primary-care-settings>

We live in troubling times. If you have any connections or influence that might be helpful in restoring factual and unbiased content of this type, please let me know or use your best judgment. Best wishes...

Patrick S. Romano, MD MPH FAAP FACP

Professor of Medicine and Pediatrics, UC Davis Division of General Medicine

Co-Editor in Chief, Agency for Healthcare Research and Quality (AHRQ) *Patient Safety Network* (PSNet and WebM&M)

[REDACTED]
Sacramento, CA 95817

Telephone [REDACTED] Facsimile [REDACTED]

E-mail: [REDACTED]

<image001.jpg>

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EXHIBIT 7



UNITED STATES OFFICE OF PERSONNEL MANAGEMENT
Washington, DC 20415

The Director

MEMORANDUM

TO: Heads and Acting Heads of Departments and Agencies

FROM: Charles Ezell, Acting Director, U.S. Office of Personnel Management

DATE: January 29, 2025

RE: Initial Guidance Regarding President Trump's Executive Order *Defending Women.*

Pursuant to its authority under 5 U.S.C. § 1103(a)(1) and (a)(5), the U.S. Office of Personnel Management (OPM) is providing the following initial guidance to agencies regarding the President's Executive Order entitled *Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government (Defending Women)*.

Steps to End Federal Funding of Gender Ideology: In light of *Defending Women*, each agency should take prompt actions to end all agency programs that use taxpayer money to promote or reflect gender ideology as defined in Section 2(f) of *Defending Women*. Specifically, agency heads should take the following steps:

1. No later than **5:00 p.m. EST on Friday, January 31, 2025**
 - a. Send an email to all agency employees announcing that the agency will be complying with *Defending Women* and this guidance.
 - b. Review all agency programs, contracts, and grants, and terminate any that promote or inculcate gender ideology.
 - c. Review all agency position descriptions and send a notification to all employees whose position description involves inculcating or promoting gender ideology that they are being placed on paid administrative leave effective immediately as the agency takes steps to close/end all initiatives, offices, and programs that inculcate or promote gender ideology.
 - d. Take down all outward facing media (websites, social media accounts, etc.) that inculcate or promote gender ideology.
 - e. Review agency email systems such as Outlook and turn off features that prompt users for their pronouns.

- f. Withdraw any final or pending documents, directives, orders, regulations, materials, forms, communications, statements, and plans that inculcate or promote gender ideology.
- g. Cancel any trainings that inculcate or promote gender ideology or have done so in the past.
- h. Disband or cancel any employee resource groups or special emphasis programs that inculcate or promote gender ideology or have done so in the past.
- i. Review all agency forms that require entry of an individual's sex and ensure that all list male or female only, and not gender identity. Remove requests for "gender" and substitute requests for "sex."
- j. Ensure that all applicable agency policies and documents, including forms, use the term "sex" and not "gender."
- k. Ensure that intimate spaces designated for women, girls, or females (or for men, boys, or males) are designated by biological sex and not gender identity.

2. No later than **12:00 p.m. EST on Friday, February 7, 2025**, report to OPM on all steps taken to implement this guidance, including:
 - a. a complete list of actions taken in response to this guidance and *Defending Women*; and
 - b. any agency plans to fully comply with this guidance and *Defending Women*.

Please contact OPM at defendingwomen@opm.gov if you have any questions regarding this guidance. Please send any reports requested by this guidance to defendingwomen@opm.gov.

cc: Chief Human Capital Officers (CHCOs), Deputy CHCOs, Human Resources Directors, and Chiefs of Staff

EXHIBIT 8

Subject: RE: removed commentaries and interviews - UPDATE

Date: Thursday, February 6, 2025 at 5:33:01 PM Eastern Standard Time

From: Schiff, Gordon D.,MD

To: Patrick S Romano

CC: [REDACTED] croyce [REDACTED]

Thank you, Patrick, for this information and all your efforts and advocacy here.

We should probably further strategize about this, but I would say on first reading here, that if the Trump administration officials insisting on removing the offending words can produce evidence that these are *not* in fact risk factors for suicide (as the data we cited did show), we would be happy to correct any factual inaccuracies. But otherwise, it would be unethical to remove this evidence-based peer reviewed information. In other words, it would be irresponsible to falsely remove this as a risk factor when in fact it was, and censor truth out to be replaced by nontruth. I suspect my co-authors would concur.

(why LGBT and transgender individuals are driven to suicide at higher rates, is a longer but obviously related and important discussion we do not discuss in the article, but one which this censorship crusade would appear to be contributing to rather than ameliorating related to this serious public health problem).

Gordy Schiff

From: Patrick S Romano [REDACTED]

Sent: Thursday, February 6, 2025 10:27 AM

To: croyce [REDACTED]; [REDACTED];

Schiff, Gordon D.,MD [REDACTED]

Cc: [REDACTED]
[REDACTED]

Subject: removed commentaries and interviews - UPDATE

External Email - Use Caution

To Harvard-affiliated PSNet colleagues...

As of this morning, AHRQ has received approval to re-post your original commentaries, which we have been discussing over the last several days.

However, the condition is the removal of the problematic words – i.e., the words “transgender” and “LGBTQ”.

In the case of Gordy’s commentary, this entails simply editing out just three words from a list of risk factors for suicide.

In the case of Malcolm’s commentary, this entails editing out just the very last sentence (“Although not germane to this particular case, it is important to note that endometriosis can occur in trans..”)

These conditions are non-negotiable.

My counter-condition for this restoration was the addition of a prominent editor's note, along these lines:

"This article was updated on February 5, 2025 to comply with President Trump's Executive Order, *Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government*."

(I also proposed identifying the words that were edited out, but that didn't fly...)

I told AHRQ that I would give each affected author(s) the choice of accepting this set of conditions for restoration, or not.

If you are unable to accept this condition, I understand completely and will continue to work independently for unconditional restoration (see NYT, Washington Post, etc.).

However, I consider it UNLIKELY that unconditional restoration will occur during the Trump Administration, so this is probably our best shot at restoration in the current policy environment.

I apologize for having to give you a very mild version of Sophie's choice, but such is the current situation... please take the time you need to consider the options, and feel free to make different decisions and communicate with me separately. (Sadly, I have several of these email to send, so trying to be efficient.)

Patrick S. Romano, MD MPH FAAP FACP

Professor of Medicine and Pediatrics, UC Davis Division of General Medicine

Co-Editor in Chief, AHRQ *Patient Safety Network* (PSNet and WebM&M)

[REDACTED]
Sacramento, CA 95817

Telephone: [REDACTED]

E-mail: [REDACTED]

Website: <https://health.ucdavis.edu/team/pediatrics/122/patrick-romano---internal-medicine---pediatrics-general-sacramento>

From: Patrick S Romano

Sent: Monday, February 3, 2025 12:34 PM

To: Royce,Celeste (HMFP - OBGYN) [REDACTED]; [REDACTED]

[REDACTED] Schiff, Gordon,M.D. [REDACTED]

Cc: [REDACTED]

Subject: RE: [External] RE: PRIDE Endometriosis Case PSNet Commentary REMOVED

I regret to inform you that your wonderful Case and Commentary from 2020 on "Endometriosis: A Common and Commonly Missed and Delayed Diagnosis," has been removed from the PSNet website due to a perception that it violates the White House policy on websites "that inculcate or promote gender ideology" (attached).

It is still visible through the Wayback machine,

<https://web.archive.org/web/20241113093130/https://psnet.ahrq.gov/web-mm/endometriosis-common-and-commonly-missed-and-delayed-diagnosis>

Please understand that your publication has not been deleted; it is simply archived so it can be restored to public access at a future time.

If you have any connections or influence that might be helpful in restoring factual and unbiased content of this type, please let me know or use your best judgment. Gordy and I have already been in contact with the Boston Globe and others on this topic.

Patrick S. Romano, MD MPH FAAP FACP
Professor of Medicine and Pediatrics, UC Davis Division of General Medicine
Co-Editor in Chief, AHRQ *Patient Safety Network* (PSNet and WebM&M)

[REDACTED]
Sacramento, CA 95817

Telephone: [REDACTED]

E-mail: [REDACTED]

Website: <https://health.ucdavis.edu/team/pediatrics/122/patrick-romano---internal-medicine---pediatrics-general-sacramento>

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